

WBS No: 1DAB01
Activity ID: 1DF0100A01

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1DAB
Activity Filter *

Starts In FY *

WBS No:	1DAB01	Title:	B776 Compliance Surveillance									
Activity ID:	1DF0100A01	Description:	B776/777 Compliance Surveillance - Authorization									
				Cost Risk		2	Schedule Risk		3			
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
A02	Inert Atmosphere - Oxvaen Analyzer	1.00	ea	HC	62	62	1,340	0	0	1,340	654	1,993
A04	Emergency Power/UPS	1.00	ea	HC	84	84	2,099	0	0	2,099	1,024	3,124
A05	Criticality Accident Alarm System	1.00	ea	HC	433	433	14,801	0	0	14,801	7,223	22,024
A06	Fire Detection/Fire Suppression	1.00	ea	HC	65	65	1,337	49,123	0	50,460	652	51,112
A07	Criticality Safety Operations	1.00	ea	HC	249	249	5,084	6,140	0	11,225	2,481	13,706
A08	OSR Compensatory Measures	1.00	ea	HC	192	192	6,284	0	0	6,284	3,067	9,351
A09	LCO Coordinator	1.00	ea	HC	338	338	8,868	0	0	8,868	4,328	13,195
A10	Routine Radiological Surveys	1.00	ea	HC	1,789	1,789	39,180	0	0	39,180	19,120	58,299
Total for Activity 1DF0100A01:						3,212	78,992	55,264	0	134,256	38,548	172,804

Line Item A02 - Inert Atmosphere - Oxygen Analyzer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.	
	Item Desc - Inert Atmosphere - Oxygen Analyzer: This LCO surveillance monitors Zone 1 inert systems and designated enclosures for fire safety involving pyrophoric plutonium. SOEs and Maintenance personnel ensure that gloveboxes that require an inert atmosphere and are used to handle in-process pyrophoric plutonium are monitored by an operable oxygen analyzer. A monthly surveillance is performed to readjust the oxygen analyzers to manufacturer's specification and to test the alarm at the 5% by volume limit.	

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	53.40	Hours
Factors	1.2	Hours per Surveillance (From walk-			2	Electricians		4	Quarterly Surveillances	
	1.1	10% surveillance following failure			0.3612	82/227 Days Remaining				
	750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI		KD10H	776 Complex Steelworkers	Linear	8.90 Hours
Factors	0.4	Hours per unit to perform surveillance			1	RCT	14	Oxvaen Analyzer Units	4	quarterly surveillances
	1.1	10% surveillance following failure			0.3612	82/227 Days Remaining				

Line Item A04 - Emergency Power/UPS

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - Emergency Power/UPS: This activity consists of the LCO surveillance requiring the emergency generator to be tested on a monthly basis for a minimum of one hour. The diesel generators shall be tested for automatic startup and pickup of loads required for the condition of loss of offsite electrical power. Process Specialists support vault/alarm access while the Alarm Tech resets five (5) panels. This scope is performed during off-shift so that facility operations do not need to be suspended for the Emergency Power testing.											

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	11.56	Hours
Factors	2	Electricians	4 hours per inspection	4 quarterly inspections	0.3612 82/227 Days Remaining		
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	26.01	Hours
Factors	2	Electricians	3 hours each per month for UPS	12 monthly inspections	0.3612 82/227 Days Remaining		
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	17.34	Hours
Factors	2	Electricians	2 hours per month for battery	12 monthly inspections	0.3612 82/227 Days Remaining		
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	5.78	Hours
Factors	1	annual inspection	2 Electricians	8 hours for annual battery inspection	0.3612 82/227 Days Remaining		
	751	OVERTIME BASE & PRE.	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	11.56	Hours
Factors	2	Electricians	4 Hours per Inspection (From walk-	4 Quarterly Inspections	0.3612 82/227 Days Remaining		
	751	OVERTIME BASE & PRE.	C100 AUTO MECHANIC	KD10H 776 Complex Steelworkers	Linear	5.78	Hours
Factors	1	Mechanic	4 Hours per Inspection (Monitor Diesel	4 Quarterly Inspections	0.3612 82/227 Days Remaining		
	751	OVERTIME BASE & PRE.	T070 MAINT. TECHS. (INSTRUMENT TEC	KD10H 776 Complex Steelworkers	Linear	5.78	Hours
Factors	1	Alarm Technician	4 Hours per Inspection (From walk-	4 Quarterly Inspections	0.3612 82/227 Days Remaining		

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Line Item A05 - Criticality Accident Alarm System

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
	Item Desc - Criticality Accident Alarm System: This LCO surveillance is performed by RCTs and Radiological Engineering in order to ensure that a criticality alarm system (utilizing detectors and coincidence circuitry in the criticality alarm system main panel) for criticality accident detection has been installed and is operable in all areas where fissile materials are handled, stored, or processed. A monthly surveillance is performed, where each detector is tested with a source to verify that it is within an acceptable range for the specific test source. These monthly surveillances are performed on off-shifts to minimize the impact to daily facility operation (overtime).					

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	K399S Building 776 Project	Linear	34.68	Hours
Factors	4 hours per Surveillance (From walk-	12 Monthly Surveillances	2 ARCI Supervisor	0.3612	82/227 Days Remaining	
	751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	K399S Building 776 Project	Linear	17.34	Hours
Factors	4 Hours per Surveillance (From walk-	1 RCT Supervisor	12 Monthly Surveillances	0.3612	82/227 Days Remaining	
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	173.38	Hours
Factors	4 Hours per Surveillance (From walk-	10 RCTs	12 Monthly Surveillances	0.3612	82/227 Days Remaining	
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	52.01	Hours
Factors	4 hours per monthly Surveillance event	3 Process Specialist	12 months	0.3612	82/227 Days Remaining	
	751 OVERTIME BASE & PRE.	T070 MAINT. TECHS. (INSTRUMENT TEC	KD10H 776 Complex Steelworkers	Linear	156.04	Hours
Factors	9 Hours per surveillance (From walk-	4 ARCI Technologists (alarm techs)	12 Monthly Surveillances	0.3612	82/227 Days Remaining	

Line Item A06 - Fire Detection/Fire Suppression

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
	Item Desc - Fire Detection/Fire Suppression: This LCO surveillance ensures the operability of the Fire Detection System and the Fire Suppression System. A visual inspection of the fire detection system is performed on a monthly basis. A quarterly surveillance includes local audible alarms, panel operation, alarm test to the Central Alarm Station, and vault heat detection system and plenum heat detectors. Also included is Glovebox overheat testing.					

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	21.67	Hours
Factors	5 Hours per week	12 GB O/H Tests per year	1 RCT	0.3612	82/227 Days Remaining	
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	43.34	Hours
Factors	5 Hours per Test	12 GB O/H Tests per year	2 Process Specialist	0.3612	82/227 Days Remaining	
	A5H SUBCONTRACTED SRVS	E120 SAFETY ENGINEERS	K263S Fire Tactical Operations	Linear	49,123.20	Dollars
Factors	1 refer to letter Brad Smeaton to Mike	136000 dollars lump sum	1 Letter number BES-081-98			
	0.3612	82/227 Days Remaining				

Line Item A07 - Criticality Safety Operations

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
	Item Desc - Criticality Safety Operations: Criticality Safety Inspections are required monthly for JH98/NSP-10; quarterly per 5B02 and annually.					

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	156.04	Hours
Factors	1 Process Specialists	12 Monthly Surveillances	36 hours per Surveillance (JH98/NSP-	0.3612	82/227 Days Remaining	
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	78.02	Hours
Factors	2 Process Specialists	4 Quarterly Surveillances	27 Hours per quarterly surveillance	0.3612	82/227 Days Remaining	
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	14.45	Hours
Factors	40 hours per annual surveillance	1 Process Specialist	0.3612	82/227 Days Remaining		
	A5H SUBCONTRACTED SRVS	0000 NONE	K399S Building 776 Project	Linear	6,140.40	Dollars
Factors	5 Inspectors	40 Hours	85 \$/Hour	0.3612	82/227 Days Remaining	

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Line Item A08 - OSR Compensatory Measures

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - OSR Compensatory Measures: Compensatory measures are invoked in response to Limited Conditions of Operations out-of-tolerance conditions or violation of Operational Safety Requirements (OSR) in the building, and have historically been fire watches for such conditions as out-of-compliance HSP31.11 Material or Heat Detector Deficiencies. The scope is for off-shift fire watch.											
	Assume 8 days out of the remaining portion of the year will require 24-hour roving fire watches in FY-00 under OSR Compensatory Measures.											

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	192.00Hours
Factors	4	D&D Workers	24	hours per day for roving fire watch	2	days	

Line Item A09 - LCO Coordinator

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - LCO Coordinator: The LCO Coordinator performs tracking and trending of LCO, ACs and Unreviewed Safety Questions (USQ) surveillance data; produces notification letters to organizations responsible for performing LCO surveillances; advises such organizations of due/past due surveillances; and maintains LCO files and documentation. This individual also attends shift turnover meetings and plan of the day/week meetings as needed in support of the LCO program; maintains and updates Shift Managers manuals; and updates the Vital Safety Systems (VSS) Status Board.											

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	338.08Hours
Factors	4	Hours per day Morqan	234	days	0.3612	82/227 Days Remaining	

Line Item A10 - Routine Radiological Surveys

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - Routine Radiological Surveys: Routine Radiological Surveys (i.e., pre-job, weekly, monthly, quarterly, semi-annual, etc.) are performed per the Site radiological Control Manual in order to ensure the safety of personnel, the facility, and the environment. The surveys include gamma-neutron, contamination control, baseline and ALARA exposure, glovebox, and/or room surveys.											

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	939.12Hours
Factors	2	Hours per survey (From walk-down)	25	Weekly Surveys	52	Weeks per year	0.3612 82/227 Days Remaining
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	329.41Hours
Factors	2	Hours per Survey (From walk-down)	12	Months	38	Monthly Surveys	0.3612 82/227 Days Remaining
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	332.30Hours
Factors	2	Survey events per year	2.5	Hours per survey (From walk-down)	184	Glovebox Surveys	0.3612 82/227 Days Remaining
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	10.84Hours
Factors	2	Surveys per Year	3	Hours per set Survey (From walk-	5	Tank Sets	0.3612 82/227 Days Remaining
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	13.00Hours
Factors	2	Source Inventories and Leak Testing	1	RCTs	18	Hours per Survey	0.3612 82/227 Days Remaining
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	164.63Hours
Factors	0.1	10% Overtime	4558	RCT hours ST for Routine	0.3612	82/227 Days Remaining	

Activity ID: 1DF0100E01 Description: B776/777 Compliance Surveillance - Environmental

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
E01	RCRA Inspections	1.00	ea	HC	687	687	16.378	0	0	16.378	7.993	24.371
E02	Organic Air Emission Surveillance	1.00	each	HC	39	39	798	0	0	798	389	1.188
Total for Activity 1DF0100E01:						726	17.177	0	0	17.177	8.382	25.559

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Line Item E01 - RCRA Inspections

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - RCRA Inspections for B776/777 include daily inspections of tank systems including process waste tanks (Process Waste Tanks, Tank T1 and T2, SR3, SR4, and SR5, T344, T345, T360, T370 and the FBI Pilot Tanks); Monthly and Annual organic inspection of vacuum accumulators; and weekly inspections of 776.1 and 777.1 Units; WEMS Management support, container management and regulatory interface and support from the WEMS Coordinator.

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear		253.56	Hours
Factors	1	Process Specialist	234	AWS Daily Inspections for Tanks	3	hours per day (From walk-down)	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear		18.78	Hours
Factors	1	Hour per week to inspect the 90 day	1	Process Specialist	52	weeks	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear		225.39	Hours
Factors	12	hours per inspection	52	weeks	1	Perform weekly inspections	0.3612	82/227 Days remaining	
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear		189.27	Hours
Factors	1	Process Specialist	131	AWS Fridays and weekends	4	Hours per day (From walk-down)	0.3612	82/227 Days remaining	

Line Item E02 - Organic Air Emission Surveillance

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Organic Air Emission Surveillance

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear		39.01	Hours
Factors	1	Surveillance/Month	9	Hours	12	Months	1	Process Specialist	
	0.3612	82/227 Days remaining							

Activity ID: 1DF0100M01 Description: B776/777 Compliance Surveillance - Other

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Fire Inspections	1.00	ea	HC	129	129	3.707	0	0	3.707	1.809	5.515
M02	SAAM/CAM Surveillance	1.00	ea	HC	465	465	10.173	0	0	10.173	4.964	15.137
M03	Hood Encl./Portable Down Draft Face Velocity Surv.	1.00	ea	HC	107	107	2.337	0	0	2.337	1.140	3.477
M04	Airhead Surveys/Change Filter Media	1.00	ea	HC	540	540	11.878	0	0	11.878	5.797	17.675
M05	Annual Smoke Test	1.00	ea	HC	120	120	4.037	0	0	4.037	1.970	6.007
M06	Eve wash/Safety Shower	1.00	ea	HC	33	33	665	0	0	665	325	990
M07	Safety/Inspections	1.00	ea	HC	0	0	0	13.682	0	13.682	0	13.682
M10	NDA Gamma Scans	2.00	ea	HC	105	211	4.685	0	0	4.685	2.286	6.971
Total for Activity 1DF0100M01:						1.604	37.481	13.682	0	51.164	18.291	69.455

Line Item M01 - Fire Inspections

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of Fire Inspections of the Flammable Cabinets (14), Fire Extinguisher Inspections (164), Fire Barriers, Egress Routes, Soft-sided Containments, monthly Building combustible loading inspections per PR0-035-CC-776/777, and glovebox combustible loading inspections per Ops Order 776/777-361.

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	K399S	Building 776 Project	Linear		78.02	Hours
Factors	1	Engineer	12	monthly inspections	18	hours per month combustible loading	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear		15.17	Hours
Factors	0.25	hours per cabinet for monthly	12	months	14	Flammable Cabinets	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear		35.54	Hours
Factors	0.05	hours per monthly Inspection per	12	months	164	Fire Extinguishers	0.3612	82/227 Days remaining	

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Line Item M02 - SAAM/CAM Surveillance

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - This activity consists of the LCO Surveillance required to verify the rooms listed in the OSR are covered by an operable Selective Alpha Air Monitor (SAAM) system. This system is used to detect the presence of airborne radioactivity above the alarm point setting of the instrument and to activate an alarm to warn personnel in the area to minimize personnel exposure. A twice-weekly surveillance is performed to visually check operating area SAAMs and recirculation air plenum SAAMs for proper settings and air flow of >.8 cubic feet per minute (cfm) and <3 cfm. Also visually check the operating effluent SAAM for proper SAAM settings and airflow of <2 cfm and <3cfm. Per ROI 4.05, Rev. 1.									
	RCTs surveil 90 SAAM/CAAM units twice per week. During the surveillance, the filter papers are changed.									

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	422.60	Hours
Factors	0.125	hours per surveillance	2	Surveillances per week	52	weeks	90	SAAM/CAM Units
	0.3612	82/227 Days remaining						
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	42.26	Hours
Factors	0.1	10% overtime per week (based on	1	RCT	1170	hours straight time CAM/SAAM	0.3612	82/227 Days remaining

Line Item M03 - Hood Encl./Portable Down Draft Face Velocity Surv.

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - This activity consists of the LCO Surveillance of the minimum face velocity on Zone 1A enclosures (gloveboxes, hoods and downdraft tables). A monthly surveillance is performed by Radiologica Control Technicians (RCTs) to either verify the enclosure minimum average face velocity >150 fpm or document that any loose surface alpha contamination is <200 dpm/100 cm2 in each Zone 1A enclosure. Operability of Zones 1 1A, and II ventilation systems is needed to maintain negative pressure and to mitigate the release of radioactive materials to the environment. Process Specialists open and close hoods and b-boxes for the RCTs.									

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	32.51	Hours
Factors	0.5	hours per hood surveillance (From	12	months	15	hood surveillances per month	0.3612	82/227 Days remaining
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	32.51	Hours
Factors	0.5	hours per survev (From walk-down)	12	months	15	Portable Downdraft Surveillances per	0.3612	82/227 Days remaining
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	32.51	Hours
Factors	0.5	hours per hood to survev (From walk-	12	months	15	monthly hood surveillances	0.3612	82/227 Days remaining
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	6.50	Hours
Factors	0.1	10% overtime	1	RCT	180	hours per veav hood/enclosure	0.3612	82/227 Days remaining
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	3.25	Hours
Factors	0.1	10% overtime	90	ST hours process specialist	0.3612	82/227 Days remaining		

Line Item M04 - Airhead Surveys/Change Filter Media

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Inspect and maintain the permanently installed air monitoring system. RCTs perform airhead surveillances.									

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	50.06	Hours
Factors	0.07	hours per unit calibration per month	12	months	165	Airhead Units requiring calibration	0.3612	82/227 Days remaining
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	435.75	Hours
Factors	0.08	hours per unit to change (From walk-	2	changes per week	52	weeks	145	Filter Media Units
	0.3612	82/227 Days remaining						
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	48.58	Hours
Factors	0.1	10% overtime	1345	ST hours RCT support airhead	0.3612	82/227 Days remaining		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	5.63	Hours
Factors	0.1	10% overtime	156	hours process specialist ST filter	0.3612	82/227 Days remaining		

WBS No: 1DAB01
Activity ID: 1DF0100M01

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WBS Filter 1DAB
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Line Item M05 - Annual Smoke Test

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.										
	Item Desc - This activity consists of RCTs performing tri-annual (required in FY-00) air flow pattern testing on 90 SAAM/CAM units annually. During this surveillance, special air flow conditions may need to be established (ie. roll-up doors open and/or shut, ventilation systems at reduced flows, etc.) and tested. These tests are performed off-shift to minimize impacts to facility operations.										
Resources	Cost Element		Skill		Department		Curve		Quantity	Units	
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project	Linear		40.00	Hours	
	Factors 40 Hours Foreman time to supervise 1 Foreman										
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear		80.00	Hours	
Resources	Factors 40 hours RCT time to inspect placement 2 RCTs										

Line Item M06 - Eyewash/Safety Shower

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.										
	Item Desc - Safety Showers and Eyewash Surveillances ensure that DOE, ANZI, and other requirements are met. Safety Showers and Eyewash Stations are flow tested monthly. A checklist is completed and submitted to the Building Manager for approval. Appropriate documentation is kept on file.										
Resources	Cost Element		Skill		Department		Curve		Quantity	Units	
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear		32.51	Hours	
	Factors 0.25 hours to inspect per month (From 12 months 30 Eve wash stations 0.3612 82/227 Days remaining										

Line Item M07 - Safety/Inspections

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.										
	Item Desc - Safety/Housekeeping Inspections consist of various activities that protect building personnel.										
Resources	Cost Element		Skill		Department		Curve		Quantity	Units	
	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	K399S	Building 776 Project	Linear		13.682.26	Dollars	
	Factors 1 Lump Sum 37880 Dollars 0.3612 82/227 Days remaining										

Line Item M10 - NDA Gamma Scans

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.										
	Item Desc - NDA Gamma Scans are required to determine the Pu gram quantity in fissile solution tanks (2 each).										
Resources	Cost Element		Skill		Department		Curve		Quantity	Units	
	750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear		14.45	Hours	
	Factors 1 Annual test 5 Tanks requiring NDA Scans 8 hours per NDA Scan 0.3612 82/227 Days remaining										
	750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear		91.02	Hours	
Resources	Factors 18 Hours per Scan 7 Plenums 2 NDA Testing Techs 0.3612 82/227 Days remaining										

Activity ID: 1DF0101A00 Description: B776/777 Compliance Surveillance - Authorization

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
A02	Inert Atmosphere - Oxygen Analyzer	1.00	ea	HC	172	172	3,709	0	0	3,709	1,769	5,478
A04	Emergency Power/UPS	1.00	ea	HC	232	232	5,812	0	0	5,812	2,772	8,584
A05	Criticality Accident Alarm System	1.00	ea	HC	1,200	1,200	40,977	0	0	40,977	19,546	60,522
A06	Fire Detection/Fire Suppression	1.00	ea	HC	180	180	3,700	136,000	0	139,700	1,765	141,465
A07	Criticality Safety Operations	1.00	ea	HC	688	688	14,076	17,000	0	31,076	6,714	37,791
A08	QSR Compensatory Measures	1.00	ea	HC	3,264	3,264	106,831	0	0	106,831	50,958	157,789
A09	LCO Coordinator	1.00	ea	HC	936	936	24,551	0	0	24,551	11,711	36,262
A10	Routine Radiological Surveys	1.00	ea	HC	4,954	4,954	108,471	0	0	108,471	51,740	160,211

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SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	32.169	32.169	0	32.169
Total for Activity 1DF0101A00:						11.626	308.127	153.000	32.169	493.295	146.976	640.272

Line Item A02 - Inert Atmosphere - Oxygen Analyzer

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Inert Atmosphere - Oxygen Analyzer:

This LCO surveillance monitors Zone 1 inert systems and designated enclosures for fire safety involving pyrophoric plutonium. SOEs and Maintenance personnel ensure that gloveboxes that require an inert atmosphere and are used to handle in-process pyrophoric plutonium are monitored by an operable oxygen analyzer. A monthly surveillance is performed to readjust the oxygen analyzers to manufacturer's specification and to test the alarm at the 5% by volume limit.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	147.84	Hours
Factors	1.2	Hours per Surveillance (From walk-	2	Electricians	14	Oxygen Analyzers	4	Quarterly Surveillances
	1.1	10% surveillance following failure						
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	24.64	Hours
Factors	0.4	Hours per unit to perform surveillance	1	RCT	14	Oxygen Analyzer Units	4	quarterly surveillances
	1.1	10% surveillance following failure						

Line Item A04 - Emergency Power/UPS

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Emergency Power/UPS:

This activity consists of the LCO surveillance requiring the emergency generator to be tested on a monthly basis for a minimum of one hour. The diesel generators shall be tested for automatic startup and pickup of loads required for the condition of loss of offsite electrical power. Process Specialists support vault/alarm access while the Alarm Tech resets five (5) panels. This scope is performed during off-shift so that facility operations do not need to be suspended for the Emergency Power testing.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	32.00	Hours
Factors	2	Electricians	4	hours per inspection	4	quarterly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	72.00	Hours
Factors	2	Electricians	3	hours each per month for UPS	12	monthly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	48.00	Hours
Factors	2	Electricians	2	hours per month for battery	12	monthly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
Factors	1	annual inspection	2	Electricians	8	hours for annual battery inspection		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	32.00	Hours
Factors	2	Electricians	4	Hours per Inspection (From walk-	4	Quarterly Inspections		
751	OVERTIME BASE & PRE.	C100	AUTO MECHANIC	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
Factors	1	Mechanic	4	Hours per Inspection (Monitor Diesel	4	Quarterly Inspections		
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
Factors	1	Alarm Technician	4	Hours per Inspection (From walk-	4	Quarterly Inspections		

Line Item A05 - Criticality Accident Alarm System

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Criticality Accident Alarm System:

This LCO surveillance is performed by RCTs and Radiological Engineering in order to ensure that a criticality alarm system (utilizing detectors and coincidence circuitry in the criticality alarm system main panel) for criticality accident detection has been installed and is operable in all areas where fissile materials are handled, stored, or processed. A monthly surveillance is performed, where each detector is tested with a source to verify that it is within an acceptable range for the specific test source. These monthly surveillances are performed on off-shifts to minimize the impact to daily facility operation (overtime).

Cost Element		Skill		Department		Curve	Quantity	Units
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751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project	Linear	96.00	Hours
Factors	4	hours per Surveillance (From walk-	12	Monthly Surveillances	2	ARCIE Supervisor		
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project	Linear	48.00	Hours
Factors	4	Hours per Surveillance (From walk-	1	RCT Supervisor	12	Monthly Surveillances		
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	480.00	Hours
Factors	4	Hours per Surveillance (From walk-	10	RCTs	12	Monthly Surveillances		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	144.00	Hours
Factors	4	hours per monthly Surveillance event	3	Process Specialist	12	months		
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	432.00	Hours
Factors	9	Hours per surveillance (From walk-	4	ARCIE Technologists (alarm techs)	12	Monthly Surveillances		

Line Item A06 - Fire Detection/Fire Suppression

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Fire Detection/Fire Suppression:

This LCO surveillance ensures the operability of the Fire Detection System and the Fire Suppression System. A visual inspection of the fire detection system is performed on a monthly basis. A quarterly surveillance includes local audible alarms, panel operation, alarm test to the Central Alarm Station, and vault heat detection system and plenum heat detectors. Also included is Glovebox overheat testing.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	60.00	Hours
Factors	5	Hours per week	12	GB O/H Tests per year	1	RCT			
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	120.00	Hours
Factors	5	Hours per Test	12	GB O/H Tests per year	2	Process Specialist			
A5H	SUBCONTRACTED SRVS		E120	SAFETY ENGINEERS	K263S	Fire Tactical Operations	Linear	136,000.00	Dollars
Factors	1	refer to letter Brad Smeaton to Mike	136000	dollars lump sum	1	Letter number BES-081-98			

Line Item A07 - Criticality Safety Operations

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Criticality Safety Operations:

Criticality Safety Inspections are required monthly for JH98/NSP-10; quarterly per 5B02 and annually.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	432.00	Hours
Factors	1	Process Specialists	12	Monthly Surveillances	36	hours per Surveillance (JH98/NSP-			
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	216.00	Hours
Factors	2	Process Specialists	4	Quarterly Surveillances	27	Hours per quarterly surveillance			
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	40.00	Hours
Factors	40	hours per annual surveillance	1	Process Specialist					
A5H	SUBCONTRACTED SRVS		0000	NONE	K399S	Building 776 Project	Linear	17,000.00	Dollars
Factors	5	Inspectors	40	Hours	85	\$/Hour			

Line Item A08 - OSR Compensatory Measures

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - OSR Compensatory Measures:

Compensatory measures are invoked in response to Limited Conditions of Operations out-of-tolerance conditions or violation of Operational Safety Requirements (OSR) in the building, and have historically been fire watches for such conditions as out-of-compliance HSP31.11 Material or Heat Detector Deficiencies. The scope is for off-shift fire watch.

Assume 34 days of the year will require 24-hour roving fire watches in FY-99 under OSR Compensatory Measures.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
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751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	3,264.00	Hours
Factors	4	Process Specialists	24	hours per month for roving fire watch	34	days per year under OSR		

Line Item A09 - LCO Coordinator

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - LCO Coordinator:

The LCO Coordinator performs tracking and trending of LCO, ACs and Unreviewed Safety Questions (USQ) surveillance data; produces notification letters to organizations responsible for performing LCO surveillances; advises such organizations of due/past due surveillances; and maintains LCO files and documentation. This individual also attends shift turnover meetings and plan of the day/week meetings as needed in support of the LCO program; maintains and updates Shift Managers manuals; and updates the Vital Safety Systems (VSS) Status Board.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	936.00	Hours
Factors	4	Hours per day		234	days				

Line Item A10 - Routine Radiological Surveys

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Routine Radiological Surveys:

Routine Radiological Surveys (i.e., pre-job, weekly, monthly, quarterly, semi-annual, etc.) are performed per the Site radiological Control Manual in order to ensure the safety of personnel, the facility, and the environment. The surveys include gamma-neutron, contamination control, baseline and ALARA exposure, glovebox, and/or room surveys.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2,600.00	Hours
Factors	2	Hours per survey (From walk-down)	25	Weekly Surveys		52	Weeks per year		
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	912.00	Hours
Factors	2	Hours per Survey (From walk-down)	12	Months		38	Monthly Surveys		
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	920.00	Hours
Factors	2	Survey events per year	2.5	Hours per survey (From walk-down)		184	Glovebox Surveys		
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	30.00	Hours
Factors	2	Surveys per Year	3	Hours per set Survey (From walk-		5	Tank Sets		
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	36.00	Hours
Factors	2	Source Inventories and Leak Testing	1	RCTs		18	Hours per Survey		
751	OVERTIME BASE & PRE.		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	455.80	Hours
Factors	0.1	10% Overtime	4558	RCT hours ST for Routine					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	19,381.71	Dollars
Factors	19381.7 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	12,787.05	Dollars
Factors	12787.1 Dollars							

Activity ID: 1DF0101E00

Description: B776/777 Compliance Surveillance - Environmental

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
E01	RCRA Inspections	1.00	ea	HC	1.902	1.902	45,344	0	0	45,344	21,629	66,974
E02	Organic Air Emission Surveillance	1.00	each	HC	108	108	2,210	0	0	2,210	1,054	3,264
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	3,716	3,716	0	3,716
Total for Activity 1DF0101E00:						2,010	47,554	0	3,716	51,270	22,683	73,953

Line Item E01 - RCRA Inspections

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary

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Item Desc - RCRA Inspections for B776/777 include daily inspections of tank systems including process waste tanks (Process Waste Tanks, Tank T1 and T2, SR3, SR4, and SR5, T344, T345, T360, T370 and the FBI Pilot Tanks); Monthly and Annual organic inspection of vacuum accumulators; and weekly inspections of 776.1 and 777.1 Units. The subcontracted support contains 776.1 and 777.1 RCRA Unit Inspections, WEMS Management support, container management and regulatory interface and support from the WEMS Coordinator.

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	702.00	Hours
Factors	1	Process Specialist	234	AWS Daily Inspections for Tanks	3	hours per day (From walk-down)			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	52.00	Hours
Factors	1	Hour per week to inspect the 90 day	1	Process Specialist	52	weeks			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	624.00	Hours
Factors	12	hours per inspection	52	weeks	1	Perform weekly inspections			
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	524.00	Hours
Factors	1	Process Specialist	131	AWS Fridays and weekends	4	Hours per day (From walk-down)			

Line Item E02 - Organic Air Emission Surveillance

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Organic Air Emission Surveillance

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	108.00	Hours
Factors	1	Surveillance/Month	9	Hours	12	Months	1	Process Specialist	

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department		Linear	2,238.64	Dollars
Factors	2238.64	Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department		Linear	1,476.93	Dollars
Factors	1476.94	Dollars							

Activity ID: 1DF0101M00 Description: B776/777 Compliance Surveillance - Other

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Fire Inspections	1.00	ea	HC	356	356	10,262	0	0	10,262	4,895	15,157
M02	SAAM/CAM Surveillance	1.00	ea	HC	1,287	1,287	28,163	0	0	28,163	13,434	41,597
M03	Hood Encl./Portable Down Draft Face Velocity Surv.	1.00	ea	HC	297	297	6,469	0	0	6,469	3,086	9,554
M04	Airhead Surveys/Change Filter Media	1.00	ea	HC	1,495	1,495	32,886	0	0	32,886	15,687	48,573
M05	Annual Smoke Test	1.00	ea	HC	572	572	19,017	0	0	19,017	9,071	28,088
M06	Evewash/Safety Shower	1.00	ea	HC	90	90	1,841	0	0	1,841	878	2,720
M07	Safety/Inspections	1.00	ea	HC	0	0	0	37,880	0	37,880	0	37,880
M10	NDA Gamma Scans	2.00	ea	HC	292	584	12,971	0	0	12,971	6,187	19,158
M11	DOP Filter Surveillance	1.00	ea	HC	540	540	11,822	0	0	11,822	5,639	17,461
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	11,648	11,648	0	11,648
Total for Activity 1DF0101M00:						5,222	123,431	37,880	11,648	172,959	58,877	231,836

Line Item M01 - Fire Inspections

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of Fire Inspections of the Flammable Cabinets (21 each), Fire Extinguisher Inspections (164) and monthly combustible loading inspections per PR0-035-FI-776/777.

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
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750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	R100S	RMRS Salaried	Linear	216.00	Hours
Factors	1	Engineer	12	monthly inspections	18	hours per month combustible loading		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	42.00	Hours
Factors	0.25	hours per cabinet for monthly	12	months	14	Flammable Cabinets		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	98.40	Hours
Factors	0.05	hours per monthly inspection per	12	months	164	Fire Extinguishers		

Line Item M02 - SAAM/CAM Surveillance

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - This activity consists of the LCO Surveillance required to verify the rooms listed in the OSR are covered by an operable Selective Alpha Air Monitor (SAAM) system. This system is used to detect the presence of airborne radioactivity above the alarm point setting of the instrument and to activate an alarm to warn personnel in the area to minimize personnel exposure. A twice-weekly surveillance is performed to visually check operating area SAAMs and recirculation air plenum SAAMs for proper settings and air flow of >.8 cubic feet per minute (cfm) and <3 cfm. Also visually check the operating effluent SAAM for proper SAAM settings and airflow of <2 cfm and <3cfm. Per ROI 4.05, Rev. 1.							
	RCTs surveilling 90 SAAM/CAAM units twice per week. During the surveillance, the filter papers are changed.							

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	1,170.00	Hours
	Factors	0.125 hours per surveillance		2	Surveillances per week		52	weeks	90	SAAM/CAM Units
	751	OVERTIME BASE & PRE.		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	117.00	Hours
	Factors	0.1 10% overtime per week (based on		1	RCT		1170	hours straight time CAM/SAAM		

Line Item M03 - Hood Encl./Portable Down Draft Face Velocity Surv.

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - This activity consists of the LCO Surveillance of the minimum face velocity on Zone 1A enclosures (gloveboxes, hoods and downdraft tables). A monthly surveillance is performed by Radiologica Control Technicians (RCTs) to either verify the enclosure minimum average face velocity >150 fpm or document that any loose surface alpha contamination is <200 dpm/100 cm2 in each Zone 1A enclosure. Operability of Zones 1 1A, and II ventilation systems is needed to maintain negative pressure and to mitigate the release of radioactive materials to the environment. Process Specialists open and close hoods and b-boxes for the RCTs.							

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
	Factors	0.5	hours per hood surveillance (From	12	months		15 hood surveillances per month			
	750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
	Factors	0.5	hours per survey (From walk-down)	12	months		15 Portable Downdraft Surveillances per			
	750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
	Factors	0.5	hours per hood to survey (From walk-	12	months		15 monthly hood surveillances			
	751	OVERTIME BASE & PRE.		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	18.00	Hours
	Factors	0.1	10% overtime	1	RCT		180 hours per year hood/enclosure			
	751	OVERTIME BASE & PRE.		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	9.00	Hours
Factors	0.1	10% overtime	90	ST hours process specialist						

Line Item M04 - Airhead Surveys/Change Filter Media

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - Inspect and maintain the permanently installed air monitoring system. RCTs perform airhead surveillances.							

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	138.60	Hours
	Factors	0.07	hours per unit calibration per month	12	months	165	Airhead Units requiring calibration		
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	1,206.40	Hours
	Factors	0.08	hours per unit to change (From walk-	2	changes per week	52	weeks	145	Filter Media Units

WBS No: 1DAB01
Activity ID: 1DF0101M00

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751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	134.50	Hours
Factors	0.1	10% overtime	1345	ST hours RCT support airhead				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	15.60	Hours
Factors	0.1	10% overtime	156	hours process specialist ST filter				

Line Item M05 - Annual Smoke Test

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of RCTs performing tri-annual (not required in FY-99 but is required in FY-00) air flow pattern testing on 90 SAAM/CAM units annually. During this surveillance, special air flow conditions may need to be established (ie. roll-up doors open and/or shut, ventilation systems at reduced flows, etc.) and tested. These tests are performed off-shift to minimize impacts to facility operations.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	16.00	Hours
	Factors	16 Hours Foreman time to supervise							
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	556.00	Hours
	Factors	556 hours RCT time to inspect placement							

Line Item M06 - Eyewash/Safety Shower

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Safety Showers and Eyewash Surveillances ensure that DOE, ANZI, and other requirements are met. Safety Showers and Eyewash Stations are flow tested monthly. A checklist is completed and submitted to the Building Manager for approval. Appropriate documentation is kept on file.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
	Factors	0.25	hours to inspect per month (From	12	months	30	Eve wash stations		

Line Item M07 - Safety/Inspections

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Safety/Housekeeping Inspections consists of various activities that protect building personnel.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	K399S	Building 776 Project	Linear	37,880.00	Dollars
	Factors	1	Lump Sum	37880	Dollars				

Line Item M10 - NDA Gamma Scans

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - NDA Gamma Scans are required to determine the Pu gram quantity in fissile solution tanks (2 each).

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	252.00	Hours
	Factors	18	Hours per Scan	7	Plenums	2	NDA Testing Techs			
	750	STRAIGHT TIME BASE		T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	40.00	Hours
	Factors	1	Annual test	5	Tanks requiring NDA Scans	8	hours per NDA Scan			

Line Item M11 - DOP Filter Surveillance

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - DOP Filter Surveillances are required to determine if plenum filters are operating as designed.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	324.00	Hours
Factors	4	RCTs at each plenum	9	plenums	9	hours each plenum		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	162.00	Hours
Factors	2	HRTs at each plenum	9	plenums	9	hours each plenum		
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	36.00	Hours
Factors	4	RCTs at each plenum	1	Primary plenum	9	hours each plenum		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	18.00	Hours
Factors	2	HRTs at each plenum	1	Primary plenum	9	hours each plenum		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	7.017.91	Dollars
Factors	7017.91	Dollars			
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	4.630.05	Dollars
Factors	4630.05	Dollars			

Activity ID: 1DF0102A00 Description: B776/777 Compliance Surveillance - Authorization

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
A02	Inert Atmosphere - Oxyaen Analyzer	1.00	ea	HC	172	172	3,709	0	0	3,709	1,309	5,018
A04	Emergency Power/UPS	1.00	ea	HC	232	232	5,812	0	0	5,812	2,051	7,863
A05	Criticality Accident Alarm System	1.00	ea	HC	1,200	1,200	40,977	0	0	40,977	14,465	55,441
A06	Fire Detection/Fire Suppression	1.00	ea	HC	180	180	3,700	136,000	0	139,700	1,306	141,006
A07	Criticality Safetv Operations	1.00	ea	HC	688	688	14,076	17,000	0	31,076	4,969	36,045
A08	OSR Compensatory Measures	1.00	ea	HC	3,264	3,264	106,831	0	0	106,831	37,711	144,542
A09	LCO Coordinator	1.00	ea	HC	936	936	24,551	0	0	24,551	8,667	33,218
A10	Routine Radiological Surveys	1.00	ea	HC	4,954	4,954	108,471	0	0	108,471	38,290	146,761
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	84,959	84,959	0	84,959
Total for Activity 1DF0102A00:						11.626	308.127	153.000	84.959	546.086	108.769	654.854

Line Item A02 - Inert Atmosphere - Oxygen Analyzer

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Inert Atmosphere - Oxygen Analyzer:
This LCO surveillance monitors Zone 1 inert systems and designated enclosures for fire safety involving pyrophoric plutonium. SOEs and Maintenance personnel ensure that gloveboxes that require an inert atmosphere and are used to handle in-process pyrophoric plutonium are monitored by an operable oxygen analyzer. A monthly surveillance is performed to readjust the oxygen analyzers to manufacturer's specification and to test the alarm at the 5% by volume limit.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	147.84	Hours
Factors	1.2	Hours per Surveillance (From walk-	2	Electricians	14	Oxvaen Analyzers	4	Quarterlv Surveillances	
	1.1	10% surveillance following failure							
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	24.64	Hours
Factors	0.4	Hours per unit to perform surveillance	1	RCT	14	Oxyvaen Analyzer Units	4	quarterly surveillances	
	1.1	10% surveillance following failure							

Line Item A04 - Emergency Power/UPS

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Emergency Power/UPS:
This activity consists of the LCO surveillance requiring the emergency generator to be tested on a monthly basis for a minimum of one hour. The diesel generators shall be tested for automatic startup and pickup of loads required for the condition of loss of offsite electrical power. Process Specialists support vault/alarm access while the Alarm Tech resets five (5) panels. This scope is performed during off-shift so that facility operations do not need to be suspended for the Emergency Power testing.

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Activity ID: 1DF0102A00

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	32.00	Hours
Factors	2	Electricians		4	hours per inspection	4	quarterly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	72.00	Hours	
Factors	2	Electricians		3	hours each per month for UPS	12	monthly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	48.00	Hours	
Factors	2	Electricians		2	hours per month for battery	12	monthly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	16.00	Hours	
Factors	1	annual inspection		2	Electricians	8	hours for annual battery inspection		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	32.00	Hours	
Factors	2	Electricians		4	Hours per Inspection (From walk-	4	Quarterly Inspections		
751	OVERTIME BASE & PRE.	C100	AUTO MECHANIC	KD10H	776 Complex Steelworkers	Linear	16.00	Hours	
Factors	1	Mechanic		4	Hours per Inspection (Monitor Diesel	4	Quarterly Inspections		
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	16.00	Hours	
Factors	1	Alarm Technician		4	Hours per Inspection (From walk-	4	Quarterly Inspections		

Line Item A05 - Criticality Accident Alarm System

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Desc - Criticality Accident Alarm System: This LCO surveillance is performed by RCTs and Radiological Engineering in order to ensure that a criticality alarm system (utilizing detectors and coincidence circuitry in the criticality alarm system main panel) for criticality accident detection has been installed and is operable in all areas where fissile materials are handled, stored, or processed. A monthly surveillance is performed, where each detector is tested with a source to verify that it is within an acceptable range for the specific test source. These monthly surveillances are performed on off-shifts to minimize the impact to daily facility operation (overtime).

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project	Linear	96.00	Hours
Factors	4	hours per Surveillance (From walk-	12	Monthly Surveillances	2	ARCIE Supervisor			
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project	Linear	48.00	Hours	
Factors	4	Hours per Surveillance (From walk-	1	RCT Supervisor	12	Monthly Surveillances			
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	480.00	Hours	
Factors	4	Hours per Surveillance (From walk-	10	RCTs	12	Monthly Surveillances			
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	144.00	Hours	
Factors	4	hours per monthly Surveillance event	3	Process Specialist	12	months			
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	432.00	Hours	
Factors	9	Hours per surveillance (From walk-	4	ARCIE Technologists (alarm techs)	12	Monthly Surveillances			

Line Item A06 - Fire Detection/Fire Suppression

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Desc - Fire Detection/Fire Suppression: This LCO surveillance ensures the operability of the Fire Detection System and the Fire Suppression System. A visual inspection of the fire detection system is performed on a monthly basis. A quarterly surveillance includes local audible alarms, panel operation, alarm test to the Central Alarm Station, and vault heat detection system and plenum heat detectors. Also included is Glovebox overhear testing.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	60.00	Hours
	Factors	5	Hours per week	12	GB O/H Tests per year	1	RCT		
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	120.00	Hours
	Factors	5	Hours per Test	12	GB O/H Tests per year	2	Process Specialist		
	A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	K263S	Fire Tactical Operations	Linear	136,000.00	Dollars
	Factors	1	refer to letter Brad Smeaton to Mike	136000	dollars lump sum	1	Letter number BES-081-98		

Line Item A07 - Criticality Safety Operations

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item
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level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Criticality Safety Operations:
Criticality Safety Inspections are required monthly for JH98/NSP-10; quarterly per 5B02 and annually.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	432.00	Hours
Factors	1	Process Specialists	12	Monthly Surveillances	36	hours per Surveillance (JH98/NSP-		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	216.00	Hours
Factors	2	Process Specialists	4	Quarterly Surveillances	27	Hours per quarterly surveillance		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	40.00	Hours
Factors	40	hours per annual surveillance	1	Process Specialist				
A5H	SUBCONTRACTED SRVS	0000	NONE	K399S	Building 776 Project	Linear	17.000.00	Dollars
Factors	5	Inspectors	40	Hours	85	\$/Hour		

Line Item A08 - OSR Compensatory Measures

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - OSR Compensatory Measures:
Compensatory measures are invoked in response to Limited Conditions of Operations out-of-tolerance conditions or violation of Operational Safety Requirements (OSR) in the building, and have historically been fire watches for such conditions as out-of-compliance HSP31.11 Material or Heat Detector Deficiencies. The scope is for off-shift fire watch.

Assume 34 days of the year will require 24-hour roving fire watches in FY-99 under OSR Compensatory Measures.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	3,264.00	Hours
Factors	4	Process Specialists	24	hours per month for roving fire watch	34	days per year under OSR		

Line Item A09 - LCO Coordinator

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - LCO Coordinator:
The LCO Coordinator performs tracking and trending of LCO, ACs and Unreviewed Safety Questions (USQ) surveillance data; produces notification letters to organizations responsible for performing LCO surveillances; advises such organizations of due/past due surveillances; and maintains LCO files and documentation. This individual also attends shift turnover meetings and plan of the day/week meetings as needed in support of the LCO program; maintains and updates Shift Managers manuals; and updates the Vital Safety Systems (VSS) Status Board.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	936.00	Hours
Factors	4	Hours per day	234	days				

Line Item A10 - Routine Radiological Surveys

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Routine Radiological Surveys:
Routine Radiological Surveys (i.e., pre-job, weekly, monthly, quarterly, semi-annual, etc.) are performed per the Site radiological Control Manual in order to ensure the safety of personnel, the facility, and the environment. The surveys include gamma-neutron, contamination control, baseline and ALARA exposure, glovebox, and/or room surveys.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	30.00	Hours
Factors	2	Surveys per Year	3	Hours per set Survey (From walk-	5	Tank Sets		
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	36.00	Hours
Factors	2	Source Inventories and Leak Testing	1	RCTs	18	Hours per Survey		

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750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	2,600.00	Hours
Factors	2	Hours per survey (From walk-down)	25	Weekly Surveys	52	Weeks per year		
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	912.00	Hours
Factors	2	Hours per Survey (From walk-down)	12	Months	38	Monthly Surveys		
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	920.00	Hours
Factors	2	Survey events per year	2.5	Hours per survey (From walk-down)	184	Glovebox Surveys		
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	455.80	Hours
Factors	0.1	10% Overtime	4558	RCT hours ST for Routine				

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	58,327.00	Dollars
Factors	58327	Dollars			
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	26,632.03	Dollars
Factors	26632.0	Dollars			

Activity ID: 1DF0102E00 Description: B776/777 Compliance Surveillance - Environmental

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
E01	RCRA Inspections	1.00	ea	HC	1.902	1.902	45,344	0	0	45,344	16,007	61,351
E02	Organic Air Emission Surveillance	1.00	each	HC	108	108	2,210	0	0	2,210	780	2,990
SYS	Contingency And Escalation	1.00	ea	EF	0	0	0	0	9,592	9,592	0	9,592
Total for Activity 1DF0102E00:						2,010	47,554	0	9,592	57,146	16,787	73,932

Line Item E01 - RCRA Inspections

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - RCRA Inspections for B776/777 include daily inspections of tank systems including process waste tanks (Process Waste Tanks, Tank T1 and T2, SR3, SR4, and SR5, T344, T345, T360, T370 and the FBI Pilot Tanks); Monthly and Annual organic inspection of vacuum accumulators; and weekly inspections of 776.1 and 777.1 Units. The subcontracted support contains 776.1 and 777.1 RCRA Unit Inspections, WEMS Management support, container management and regulatory interface and support from the WEMS Coordinator.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	702.00	Hours
Factors	1	Process Specialist		234 AWS Daily Inspections for Tanks	3	hours per day (From walk-down)			
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	52.00	Hours
Factors	1	Hour per week to inspect the 90 day		1 Process Specialist	52	weeks			
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	624.00	Hours
Factors	12	hours per inspection		52 weeks	1	Perform weekly inspections			
751	OVERTIME BASE & PRE.		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	524.00	Hours
Factors	1	Process Specialist		131 AWS Fridays and weekends	4	Hours per day (From walk-down)			

Line Item E02 - Organic Air Emission Surveillance

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Organic Air Emission Surveillance

Resources

Cost Element		Skill		Department		Curve	Quantity	Units	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	108.00	Hours	
Factors	1	Surveillance/Month		9	Hours	12	Months	1	Process Specialist

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
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CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	6,585.07	Dollars
<i>Factors</i> 6585.07 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	3,006.73	Dollars
<i>Factors</i> 3006.73 Dollars								

Activity ID: 1DF0102M00 Description: B776/777 Compliance Surveillance - Other

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Fire Inspections	1.00	ea	HC	356	356	10,262	0	0	10,262	3,622	13,884
M02	SAAM/CAM Surveillance	1.00	ea	HC	1,287	1,287	28,163	0	0	28,163	9,942	38,105
M03	Hood Encl./Portable Down Draft Face Velocity Surv.	1.00	ea	HC	297	297	6,469	0	0	6,469	2,283	8,752
M04	Airhead Surveys/Change Filter Media	1.00	ea	HC	1,495	1,495	32,886	0	0	32,886	11,609	44,495
M05	Annual Smoke Test	1.00	ea	HC	572	572	19,017	0	0	19,017	6,713	25,730
M06	Evewash/Safetv Shower	1.00	ea	HC	90	90	1,841	0	0	1,841	650	2,491
M07	Safetv/Inspections	1.00	ea	HC	0	0	0	37,880	0	37,880	0	37,880
M10	NDA Gamma Scans	2.00	ea	HC	292	584	12,971	0	0	12,971	4,579	17,549
M11	DOP Filter Surveillance	1.00	ea	HC	540	540	11,822	0	0	11,822	4,173	15,995
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	30,543	30,543	0	30,543
Total for Activity 1DF0102M00:						5,222	123,431	37,880	30,543	191,855	43,571	235,426

Line Item M01 - Fire Inspections

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of Fire Inspections of the Flammable Cabinets (21 each), Fire Extinguisher Inspections (164) and monthly combustible loading inspections per PR0-035-FI-776/777.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E130 OTHER ENGINEERS	R100S RMRS Salaried	Linear	216.00	Hours
<i>Factors</i> 1 Engineer 12 monthly inspections 18 hours per month combustible loading						
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	42.00	Hours
<i>Factors</i> 0.25 hours per cabinet for monthly 12 months 14 Flammable Cabinets						
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	98.40	Hours
<i>Factors</i> 0.05 hours per monthly Inspection per 12 months 164 Fire Extinguishers						

Line Item M02 - SAAM/CAM Surveillance

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of the LCO Surveillance required to verify the rooms listed in the OSR are covered by an operable Selective Alpha Air Monitor (SAAM) system. This system is used to detect the presence of airborne radioactivity above the alarm point setting of the instrument and to activate an alarm to warn personnel in the area to minimize personnel exposure. A twice-weekly surveillance is performed to visually check operating area SAAMs and recirculation air plenum SAAMs for proper settings and air flow of >.8 cubic feet per minute (cfm) and <3 cfm. Also visually check the operating effluent SAAM for proper SAAM settings and airflow of <2 cfm and <3cfm. Per ROI 4.05, Rev. 1.

RCTs surveilling 90 SAAM/CAAM units twice per week. During the surveillance, the filter papers are changed.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	1,170.00	Hours
<i>Factors</i> 0.125 hours per surveillance 2 Surveillances per week 52 weeks 90 SAAM/CAM Units						
751	OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	117.00	Hours
<i>Factors</i> 0.1 10% overtime per week (based on 1 RCT 1170 hours straight time CAM/SAAM						

Line Item M03 - Hood Encl./Portable Down Draft Face Velocity Surv.

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of the LCO Surveillance of the minimum face velocity on Zone 1A enclosures (gloveboxes, hoods and downdraft tables). A

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monthly surveillance is performed by Radiologica Control Technicians (RCTs) to either verify the enclosure minimum average face velocity >150 fpm or document that any loose surface alpha contamination is <200 dpm/100 cm2 in each Zone 1A enclosure. Operability of Zones 1 1A, and II ventilation systems is needed to maintain negative pressure and to mitigate the release of radioactive materials to the environment. Process Specialists open and close hoods and b-boxes for the RCTs.

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
Factors	0.5	hours per hood surveillance (From	12	months	15	hood surveillances per month			
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
Factors	0.5	hours per survey (From walk-down)	12	months	15	Portable Downdraft Surveillances per			
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
Factors	0.5	hours per hood to survey (From walk-	12	months	15	monthly hood surveillances			
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	18.00	Hours
Factors	0.1	10% overtime	1	RCT	180	hours per year hood/enclosure			
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	9.00	Hours
Factors	0.1	10% overtime	90	ST hours process specialist					

Line Item M04 - Airhead Surveys/Change Filter Media

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.								
	Item Desc - Inspect and maintain the permanently installed air monitoring system. RCTs perform airhead surveillances.								

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	138.60	Hours
Factors	0.07	hours per unit calibration per month	12	months	165	Airhead Units requiring calibration			
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	1,206.40	Hours
Factors	0.08	hours per unit to change (From walk-	2	changes per week	52	weeks	145	Filter Media Units	
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	134.50	Hours
Factors	0.1	10% overtime	1345	ST hours RCT support airhead					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	15.60	Hours
Factors	0.1	10% overtime	156	hours process specialist ST filter					

Line Item M05 - Annual Smoke Test

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.								
	Item Desc - This activity consists of RCTs performing tri-annual (not required in FY-99 but is required in FY-00) air flow pattern testing on 90 SAAM/CAM units annually. During this surveillance, special air flow conditions may need to be established (ie. roll-up doors open and/or shut, ventilation systems at reduced flows, etc.) and tested. These tests are performed off-shift to minimize impacts to facility operations.								

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	16.00	Hours
Factors	16	Hours Foreman time to supervise							
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	556.00	Hours
Factors	556	hours RCT time to inspect placement							

Line Item M06 - Eyewash/Safety Shower

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.								
	Item Desc - Safety Showers and Eyewash Surveillances ensure that DOE, ANZI, and other requirements are met. Safety Showers and Eyewash Stations are flow tested monthly. A checklist is completed and submitted to the Building Manager for approval. Appropriate documentation is kept on file.								

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
Factors	0.25	hours to inspect per month (From	12	months	30	Eve wash stations			

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Line Item M07 - Safety/Inspections

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.				
		Item Desc - Safety/Housekeeping Inspections consists of various activities that protect building personnel.				
Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	K399S Building 776 Project	Linear	37.880.00	Dollars
	<i>Factors</i> 1 Lump Sum	37880 Dollars				

Line Item M10 - NDA Gamma Scans

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.				
		Item Desc - NDA Gamma Scans are required to determine the Pu gram quantity in fissile solution tanks (2 each).				
Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KD10H 776 Complex Steelworkers	Linear	40.00	Hours
	<i>Factors</i> 1 Annual test	5 Tanks requiring NDA Scans	8 hours per NDA Scan			
	750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KD10H 776 Complex Steelworkers	Linear	252.00	Hours
	<i>Factors</i> 18 Hours per Scan	7 Plenums	2 NDA Testing Techs			

Line Item M11 - DOP Filter Surveillance

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.				
		Item Desc - DOP Filter Surveillances are required to determine if plenum filters are operating as designed.				
Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	324.00	Hours
	<i>Factors</i> 4 RCTs at each plenum	9 plenums	9 hours each plenum			
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	162.00	Hours
	<i>Factors</i> 2 HRTs at each plenum	9 plenums	9 hours each plenum			
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	36.00	Hours
	<i>Factors</i> 4 RCTs at each plenum	1 Primary plenum	9 hours each plenum			
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	18.00	Hours
	<i>Factors</i> 2 HRTs at each plenum	1 Primary plenum	9 hours each plenum			

Line Item SYS - Contingency And Escalation

BOE						
Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	20.969.05	Dollars
	<i>Factors</i> 20969.1 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	9.574.44	Dollars
	<i>Factors</i> 9574.44 Dollars					

Activity ID: 1DF0103A00 Description: B776/777 Compliance Surveillance - Authorization

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
A02	Inert Atmosphere - Oxygen Analyzer	1.00	ea	HC	172	172	3,709	0	0	3,709	1,283	4,992
A04	Emergency Power/UPS	1.00	ea	HC	232	232	5,812	0	0	5,812	2,011	7,822
A05	Criticality Accident Alarm System	1.00	ea	HC	1,200	1,200	40,977	0	0	40,977	14,178	55,155
A06	Fire Detection/Fire Suppression	1.00	ea	HC	180	180	3,700	136,000	0	139,700	1,280	140,980
A07	Criticality Safety Operations	1.00	ea	HC	688	688	14,076	17,000	0	31,076	4,870	35,947
A08	OSR Compensatory Measures	1.00	ea	HC	3,264	3,264	106,831	0	0	106,831	36,963	143,794
A09	LCO Coordinator	1.00	ea	HC	936	936	24,551	0	0	24,551	8,495	33,046
A10	Routine Radiological Surveys	1.00	ea	HC	4,954	4,954	108,471	0	0	108,471	37,531	146,001

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SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	157.010	157.010	0	157.010
Total for Activity 1DF0103A00:						11.626	308.127	153.000	157.010	618.136	106.612	724.748

Line Item A02 - Inert Atmosphere - Oxygen Analyzer

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Inert Atmosphere - Oxygen Analyzer:

This LCO surveillance monitors Zone 1 inert systems and designated enclosures for fire safety involving pyrophoric plutonium. SOEs and Maintenance personnel ensure that gloveboxes that require an inert atmosphere and are used to handle in-process pyrophoric plutonium are monitored by an operable oxygen analyzer. A monthly surveillance is performed to readjust the oxygen analyzers to manufacturer's specification and to test the alarm at the 5% by volume limit.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	147.84	Hours
Factors	1.2	Hours per Surveillance (From walk-	2	Electricians	14	Oxygen Analyzers	4	Quarterly Surveillances
	1.1	10% surveillance following failure						
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	24.64	Hours
Factors	0.4	Hours per unit to perform surveillance	1	RCT	14	Oxygen Analyzer Units	4	quarterly surveillances
	1.1	10% surveillance following failure						

Line Item A04 - Emergency Power/UPS

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Emergency Power/UPS:

This activity consists of the LCO surveillance requiring the emergency generator to be tested on a monthly basis for a minimum of one hour. The diesel generators shall be tested for automatic startup and pickup of loads required for the condition of loss of offsite electrical power. Process Specialists support vault/alarm access while the Alarm Tech resets five (5) panels. This scope is performed during off-shift so that facility operations do not need to be suspended for the Emergency Power testing.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	32.00	Hours
Factors	2	Electricians	4	hours per inspection	4	quarterly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	72.00	Hours
Factors	2	Electricians	3	hours each per month for UPS	12	monthly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	48.00	Hours
Factors	2	Electricians	2	hours per month for battery	12	monthly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
Factors	1	annual inspection	2	Electricians	8	hours for annual battery inspection		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	32.00	Hours
Factors	2	Electricians	4	Hours per Inspection (From walk-	4	Quarterly Inspections		
751	OVERTIME BASE & PRE.	C100	AUTO MECHANIC	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
Factors	1	Mechanic	4	Hours per Inspection (Monitor Diesel	4	Quarterly Inspections		
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
Factors	1	Alarm Technician	4	Hours per Inspection (From walk-	4	Quarterly Inspections		

Line Item A05 - Criticality Accident Alarm System

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Criticality Accident Alarm System:

This LCO surveillance is performed by RCTs and Radiological Engineering in order to ensure that a criticality alarm system (utilizing detectors and coincidence circuitry in the criticality alarm system main panel) for criticality accident detection has been installed and is operable in all areas where fissile materials are handled, stored, or processed. A monthly surveillance is performed, where each detector is tested with a source to verify that it is within an acceptable range for the specific test source. These monthly surveillances are performed on off-shifts to minimize the impact to daily facility operation (overtime).

Cost Element		Skill		Department		Curve	Quantity	Units
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751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project	Linear	96.00	Hours
Factors	4	hours per Surveillance (From walk-	12	Monthly Surveillances	2	ARCIE Supervisor		
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project	Linear	48.00	Hours
Factors	4	Hours per Surveillance (From walk-	1	RCT Supervisor	12	Monthly Surveillances		
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	480.00	Hours
Factors	4	Hours per Surveillance (From walk-	10	RCTs	12	Monthly Surveillances		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	144.00	Hours
Factors	4	hours per monthly Surveillance event	3	Process Specialist	12	months		
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	432.00	Hours
Factors	9	Hours per surveillance (From walk-	4	ARCIE Technologists (alarm techs)	12	Monthly Surveillances		

Line Item A06 - Fire Detection/Fire Suppression

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Fire Detection/Fire Suppression:

This LCO surveillance ensures the operability of the Fire Detection System and the Fire Suppression System. A visual inspection of the fire detection system is performed on a monthly basis. A quarterly surveillance includes local audible alarms, panel operation, alarm test to the Central Alarm Station, and vault heat detection system and plenum heat detectors. Also included is Glovebox overheat testing.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	60.00	Hours
Factors	5	Hours per week	12	GB O/H Tests per year	1	RCT			
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	120.00	Hours
Factors	5	Hours per Test	12	GB O/H Tests per year	2	Process Specialist			
A5H	SUBCONTRACTED SRVS		E120	SAFETY ENGINEERS	K263S	Fire Tactical Operations	Linear	136,000.00	Dollars
Factors	1	refer to letter Brad Smeaton to Mike	136000	dollars lump sum	1	Letter number BES-081-98			

Line Item A07 - Criticality Safety Operations

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Criticality Safety Operations:

Criticality Safety Inspections are required monthly for JH98/NSP-10; quarterly per 5B02 and annually.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	432.00	Hours
Factors	1	Process Specialists	12	Monthly Surveillances	36	hours per Surveillance (JH98/NSP-			
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	216.00	Hours
Factors	2	Process Specialists	4	Quarterly Surveillances	27	Hours per quarterly surveillance			
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	40.00	Hours
Factors	40	hours per annual surveillance	1	Process Specialist					
A5H	SUBCONTRACTED SRVS		0000	NONE	K399S	Building 776 Project	Linear	17,000.00	Dollars
Factors	5	Inspectors	40	Hours	85	\$/Hour			

Line Item A08 - OSR Compensatory Measures

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - OSR Compensatory Measures:

Compensatory measures are invoked in response to Limited Conditions of Operations out-of-tolerance conditions or violation of Operational Safety Requirements (OSR) in the building, and have historically been fire watches for such conditions as out-of-compliance HSP31.11 Material or Heat Detector Deficiencies. The scope is for off-shift fire watch.

Assume 34 days of the year will require 24-hour roving fire watches in FY-99 under OSR Compensatory Measures.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
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751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	3,264.00	Hours
Factors	4	Process Specialists	24	hours per month for roving fire watch	34	days per year under OSR		

Line Item A09 - LCO Coordinator

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - LCO Coordinator:	The LCO Coordinator performs tracking and trending of LCO, ACs and Unreviewed Safety Questions (USQ) surveillance data; produces notification letters to organizations responsible for performing LCO surveillances; advises such organizations of due/past due surveillances; and maintains LCO files and documentation. This individual also attends shift turnover meetings and plan of the day/week meetings as needed in support of the LCO program; maintains and updates Shift Managers manuals; and updates the Vital Safety Systems (VSS) Status Board.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFF	R100S	RMRS Salaried	Linear	936.00	Hours
	Factors	4	Hours per day	234	days				

Line Item A10 - Routine Radiological Surveys

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - Routine Radiological Surveys:	Routine Radiological Surveys (i.e., pre-job, weekly, monthly, quarterly, semi-annual, etc.) are performed per the Site radiological Control Manual in order to ensure the safety of personnel, the facility, and the environment. The surveys include gamma-neutron, contamination control, baseline and ALARA exposure, glovebox, and/or room surveys.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	30.00	Hours
	Factors	2	Surveys per Year	3	Hours per set Survey (From walk-	5	Tank Sets		
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	36.00	Hours
	Factors	2	Source Inventories and Leak Testing	1	RCTs	18	Hours per Survey		
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2,600.00	Hours
	Factors	2	Hours per survey (From walk-down)	25	Weekly Surveys	52	Weeks per year		
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	912.00	Hours
	Factors	2	Hours per Survey (From walk-down)	12	Months	38	Monthly Surveys		
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	920.00	Hours
Factors	2	Survey events per year	2.5	Hours per survey (From walk-down)	184	Glovebox Surveys			
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	455.80	Hours	
Factors	0.1	10% Overtime	4558	RCT hours ST for Routine					

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	113,472.60	Dollars
	Factors 113473 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	43,537.17	Dollars
	Factors 43537.2 Dollars									

Activity ID: 1DF0103E00 Description: B776/777 Compliance Surveillance - Environmental

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
E01	RCRA Inspections	1.00	ea	HC	1.902	1.902	45,344	0	0	45,344	15,689	61,034
E02	Organic Air Emission Surveillance	1.00	each	HC	108	108	2,210	0	0	2,210	765	2,974
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	17,702	17,702	0	17,702
Total for Activity 1DF0103E00:						2,010	47,554	0	17,702	65,256	16,454	81,709

Line Item E01 - RCRA Inspections

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary
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WBS No: 1DAB01
Activity ID: 1DF0103E00

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Item Desc - RCRA Inspections for B776/777 include daily inspections of tank systems including process waste tanks (Process Waste Tanks, Tank T1 and T2, SR3, SR4, and SR5, T344, T345, T360, T370 and the FBI Pilot Tanks); Monthly and Annual organic inspection of vacuum accumulators; and weekly inspections of 776.1 and 777.1 Units. The subcontracted support contains 776.1 and 777.1 RCRA Unit Inspections, WEMS Management support, container management and regulatory interface and support from the WEMS Coordinator.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	702.00	Hours
Factors	1 Process Specialist	234 AWS Daily Inspections for Tanks	3 hours per day (From walk-down)			
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	52.00	Hours
Factors	1 Hour per week to inspect the 90 day	1 Process Specialist	52 weeks			
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	624.00	Hours
Factors	12 hours per inspection	52 weeks	1 Perform weekly inspections			
751	OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	524.00	Hours
Factors	1 Process Specialist	131 AWS Fridays and weekends	4 Hours per day (From walk-down)			

Line Item E02 - Organic Air Emission Surveillance

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Organic Air Emission Surveillance

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	108.00	Hours
Factors	1 Surveillance/Month	9 Hours	12 Months	1 Process Specialist		

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	12.793.09	Dollars
Factors	12793.1 Dollars					
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	4.908.45	Dollars
Factors	4908.45 Dollars					

Activity ID: 1DF0103M00 Description: B776/777 Compliance Surveillance - Other

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Fire Inspections	1.00	ea	HC	356	356	10,262	0	0	10,262	3,551	13,813
M02	SAAM/CAM Surveillance	1.00	ea	HC	1,287	1,287	28,163	0	0	28,163	9,744	37,907
M03	Hood Encl./Portable Down Draft Face Velocity Surv.	1.00	ea	HC	297	297	6,469	0	0	6,469	2,238	8,707
M04	Airhead Surveys/Change Filter Media	1.00	ea	HC	1,495	1,495	32,886	0	0	32,886	11,379	44,265
M05	Annual Smoke Test	1.00	ea	HC	572	572	19,017	0	0	19,017	6,580	25,597
M06	Evevash/Safetv Shower	1.00	ea	HC	90	90	1,841	0	0	1,841	637	2,479
M07	Safetv/Inspections	1.00	ea	HC	0	0	0	37,880	0	37,880	0	37,880
M10	NDA Gamma Scans	2.00	ea	HC	292	584	12,971	0	0	12,971	4,488	17,458
M11	DOP Filter Surveillance	1.00	ea	HC	540	540	11,822	0	0	11,822	4,090	15,913
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	56,422	56,422	0	56,422
Total for Activity 1DF0103M00:						5,222	123,431	37,880	56,422	217,733	42,707	260,440

Line Item M01 - Fire Inspections

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of Fire Inspections of the Flammable Cabinets (21 each), Fire Extinguisher Inspections (164) and monthly combustible loading inspections per PR0-035-FI-776/777.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	R100S	RMRS Salaried	Linear	216.00	Hours
Factors	1	Engineer	12	monthly inspections	18	hours per month combustible loading		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	42.00	Hours
Factors	0.25	hours per cabinet for monthly	12	months	14	Flammable Cabinets		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	98.40	Hours
Factors	0.05	hours per monthly inspection per	12	months	164	Fire Extinguishers		

Line Item M02 - SAAM/CAM Surveillance

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - This activity consists of the LCO Surveillance required to verify the rooms listed in the OSR are covered by an operable Selective Alpha Air Monitor (SAAM) system. This system is used to detect the presence of airborne radioactivity above the alarm point setting of the instrument and to activate an alarm to warn personnel in the area to minimize personnel exposure. A twice-weekly surveillance is performed to visually check operating area SAAMs and recirculation air plenum SAAMs for proper settings and air flow of >.8 cubic feet per minute (cfm) and <3 cfm. Also visually check the operating effluent SAAM for proper SAAM settings and airflow of <2 cfm and <3cfm. Per ROI 4.05, Rev. 1.							
	RCTs surveilling 90 SAAM/CAAM units twice per week. During the surveillance, the filter papers are changed.							

Resources	Cost Element			Skill			Department			Curve	Quantity	Units		
	750	STRAIGHT TIME BASE			T050	RADIATION CONTROL TECHNOLOGI			KD10H	776 Complex Steelworkers	Linear	1,170.00	Hours	
	Factors	0.125	hours per surveillance			2	Surveillances per week			52	weeks	90	SAAM/CAM Units	
	751	OVERTIME BASE & PRE.			T050	RADIATION CONTROL TECHNOLOGI			KD10H	776 Complex Steelworkers	Linear	117.00	Hours	
	Factors	0.1	10% overtime per week (based on			1	RCT			1170	hours straight time CAM/SAAM			

Line Item M03 - Hood Encl./Portable Down Draft Face Velocity Surv.

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - This activity consists of the LCO Surveillance of the minimum face velocity on Zone 1A enclosures (gloveboxes, hoods and downdraft tables). A monthly surveillance is performed by Radiologica Control Technicians (RCTs) to either verify the enclosure minimum average face velocity >150 fpm or document that any loose surface alpha contamination is <200 dpm/100 cm2 in each Zone 1A enclosure. Operability of Zones 1 1A, and II ventilation systems is needed to maintain negative pressure and to mitigate the release of radioactive materials to the environment. Process Specialists open and close hoods and b-boxes for the RCTs.							

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
	Factors	0.5 hours per hood surveillance (From		12 months	15 hood surveillances per month				
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
	Factors	0.5 hours per survey (From walk-down)		12 months	15 Portable Downdraft Surveillances per				
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
	Factors	0.5 hours per hood to survey (From walk-		12 months	15 monthly hood surveillances				
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	18.00	Hours
	Factors	0.1 10% overtime		1 RCT	180 hours per year hood/enclosure				
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	9.00	Hours
Factors	0.1 10% overtime		90 ST hours process specialist						

Line Item M04 - Airhead Surveys/Change Filter Media

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - Inspect and maintain the permanently installed air monitoring system. RCTs perform airhead surveillances.							

Resources	Cost Element		Skill		Department		Curve	Quantity	Units	
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	1,206.40	Hours	
	Factors	0.08 hours per unit to change (From walk-		2	changes per week		52	weeks	145	Filter Media Units
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	138.60	Hours	
	Factors	0.07 hours per unit calibration per month		12	months		165	Airhead Units requiring calibration		

WBS No: 1DAB01
Activity ID: 1DF0103M00

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751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	134.50	Hours
Factors	0.1	10% overtime	1345	ST hours RCT support airhead				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	15.60	Hours
Factors	0.1	10% overtime	156	hours process specialist ST filter				

Line Item M05 - Annual Smoke Test

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of RCTs performing tri-annual (not required in FY-99 but is required in FY-00) air flow pattern testing on 90 SAAM/CAM units annually. During this surveillance, special air flow conditions may need to be established (ie. roll-up doors open and/or shut, ventilation systems at reduced flows, etc.) and tested. These tests are performed off-shift to minimize impacts to facility operations.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	16.00	Hours
	Factors	16 Hours Foreman time to supervise							
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	556.00	Hours
	Factors	556 hours RCT time to inspect placement							

Line Item M06 - Eyewash/Safety Shower

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Safety Showers and Eyewash Surveillances ensure that DOE, ANZI, and other requirements are met. Safety Showers and Eyewash Stations are flow tested monthly. A checklist is completed and submitted to the Building Manager for approval. Appropriate documentation is kept on file.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	90.00	Hours
	Factors	0.25	hours to inspect per month (From	12	months	30	Eve wash stations		

Line Item M07 - Safety/Inspections

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Safety/Housekeeping Inspections consists of various activities that protect building personnel.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	K399S	Building 776 Project	Linear	37,880.00	Dollars
	Factors	1	Lump Sum	37880	Dollars				

Line Item M10 - NDA Gamma Scans

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - NDA Gamma Scans are required to determine the Pu gram quantity in fissile solution tanks (2 each).

Resources	Cost Element			Skill			Department			Curve	Quantity	Units
	750	STRAIGHT TIME BASE		T070	MAINT. TECHS. (INSTRUMENT TEC		KD10H	776 Complex Steelworkers		Linear	40.00	Hours
	Factors	1	Annual test	5	Tanks requiring NDA Scans		8	hours per NDA Scan				
	750	STRAIGHT TIME BASE		T070	MAINT. TECHS. (INSTRUMENT TEC		KD10H	776 Complex Steelworkers		Linear	252.00	Hours
	Factors	18	Hours per Scan	7	Plenums		2	NDA Testina Techs				

Line Item M11 - DOP Filter Surveillance

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - DOP Filter Surveillances are required to determine if plenum filters are operating as designed.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1DAB01
Activity ID: 1DF0103M00

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WBS Filter 1DAB
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750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	324.00	Hours
Factors	4	RCTs at each plenum	9	plenums	9	hours each plenum		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	162.00	Hours
Factors	2	HRTs at each plenum	9	plenums	9	hours each plenum		
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	36.00	Hours
Factors	4	RCTs at each plenum	1	Primary plenum	9	hours each plenum		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	18.00	Hours
Factors	2	HRTs at each plenum	1	Primary plenum	9	hours each plenum		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	40.776.65	Dollars
Factors	40776.7	Dollars			
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	15.645.19	Dollars
Factors	15645.2	Dollars			

Activity ID: 1DXXXFA00 Description: End of B776/777 Compliance Surv - Authorization

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
A02	Inert Atmosphere - Oxyaen Analyzer	0.66	ea	HC	172	113	2,440	0	0	2,440	688	3,128
A04	Emergency Power/UPS	0.66	ea	HC	232	153	3,823	0	0	3,823	1,078	4,902
A05	Criticality Accident Alarm System	0.66	ea	HC	1,200	789	26,958	0	0	26,958	7,602	34,561
A06	Fire Detection/Fire Suppression	0.66	ea	HC	180	118	2,434	89,474	0	91,908	686	92,595
A07	Criticality Safetv Operations	0.66	ea	HC	688	453	9,261	11,184	0	20,445	2,612	23,057
A08	OSR Compensatory Measures	0.66	ea	HC	3,264	2,147	70,283	0	0	70,283	19,820	90,103
A09	LCO Coordinator	0.66	ea	HC	936	616	16,152	0	0	16,152	4,555	20,707
A10	Routine Radiological Surveys	0.66	ea	HC	4,954	3,259	71,362	0	0	71,362	20,124	91,486
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	51.382	51,382	0	51,382
Total for Activity 1DXXXFA00:						7,649	202,715	100,658	51,382	354,755	57,166	411,920

Line Item A02 - Inert Atmosphere - Oxygen Analyzer

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Inert Atmosphere - Oxygen Analyzer:
This LCO surveillance monitors Zone 1 inert systems and designated enclosures for fire safety involving pyrophoric plutonium. SOEs and Maintenance personnel ensure that gloveboxes that require an inert atmosphere and are used to handle in-process pyrophoric plutonium are monitored by an operable oxygen analyzer. A monthly surveillance is performed to readjust the oxygen analyzers to manufacturer's specification and to test the alarm at the 5% by volume limit.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	147.84	Hours
Factors	1.2	Hours per Surveillance (From walk-	2	Electricians	14	Oxvaen Analyzers	4	Quarterlv Surveillances	
	1.1	10% surveillance following failure							
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	24.64	Hours
Factors	0.4	Hours per unit to perform surveillance	1	RCT	14	Oxyaen Analyzer Units	4	quarterly surveillances	
	1.1	10% surveillance following failure							

Line Item A04 - Emergency Power/UPS

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Emergency Power/UPS:
This activity consists of the LCO surveillance requiring the emergency generator to be tested on a monthly basis for a minimum of one hour. The diesel generators shall be tested for automatic startup and pickup of loads required for the condition of loss of offsite electrical power. Process Specialists support vault/alarm access while the Alarm Tech resets five (5) panels. This scope is performed during off-shift so that facility operations do not need to be suspended for the Emergency Power testing.

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	32.00	Hours
Factors	2	Electricians		4	hours per inspection	4	quarterly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	72.00	Hours	
Factors	2	Electricians		3	hours each per month for UPS	12	monthly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	48.00	Hours	
Factors	2	Electricians		2	hours per month for battery	12	monthly inspections		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	16.00	Hours	
Factors	1	annual inspection		2	Electricians	8	hours for annual battery inspection		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	32.00	Hours	
Factors	2	Electricians		4	Hours per Inspection (From walk-	4	Quarterly Inspections		
751	OVERTIME BASE & PRE.	C100	AUTO MECHANIC	KD10H	776 Complex Steelworkers	Linear	16.00	Hours	
Factors	1	Mechanic		4	Hours per Inspection (Monitor Diesel	4	Quarterly Inspections		
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	16.00	Hours	
Factors	1	Alarm Technician		4	Hours per Inspection (From walk-	4	Quarterly Inspections		

Line Item A05 - Criticality Accident Alarm System

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Desc - Criticality Accident Alarm System: This LCO surveillance is performed by RCTs and Radiological Engineering in order to ensure that a criticality alarm system (utilizing detectors and coincidence circuitry in the criticality alarm system main panel) for criticality accident detection has been installed and is operable in all areas where fissile materials are handled, stored, or processed. A monthly surveillance is performed, where each detector is tested with a source to verify that it is within an acceptable range for the specific test source. These monthly surveillances are performed on off-shifts to minimize the impact to daily facility operation (overtime).

Resources	Cost Element			Skill		Department		Curve	Quantity	Units		
	751	OVERTIME BASE & PRE.		M010	FOREMEN / TEAM LEADS / GROUP		K399S	Building 776 Project		Linear	96.00	Hours
	Factors	4	hours per Surveillance (From walk-		12	Monthly Surveillances		2	ARCIE Supervisor			
	751	OVERTIME BASE & PRE.		M010	FOREMEN / TEAM LEADS / GROUP		K399S	Building 776 Project		Linear	48.00	Hours
	Factors	4	Hours per Surveillance (From walk-		1	RCT Supervisor		12	Monthly Surveillances			
	751	OVERTIME BASE & PRE.		T050	RADIATION CONTROL TECHNOLOGI		KD10H	776 Complex Steelworkers		Linear	480.00	Hours
	Factors	4	Hours per Surveillance (From walk-		10	RCTs		12	Monthly Surveillances			
	751	OVERTIME BASE & PRE.		T060	D&D HAZ REDUC TECH / RISK RED		KD10H	776 Complex Steelworkers		Linear	144.00	Hours
	Factors	4	hours per monthly Surveillance event		3	Process Specialist		12	months			
	751	OVERTIME BASE & PRE.		T070	MAINT. TECHS. (INSTRUMENT TEC		KD10H	776 Complex Steelworkers		Linear	432.00	Hours
Factors	9	Hours per surveillance (From walk-		4	ARCIE Technoloaists (alarm techs)		12	Monthly Surveillances				

Line Item A06 - Fire Detection/Fire Suppression

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Desc - Fire Detection/Fire Suppression: This LCO surveillance ensures the operability of the Fire Detection System and the Fire Suppression System. A visual inspection of the fire detection system is performed on a monthly basis. A quarterly surveillance includes local audible alarms, panel operation, alarm test to the Central Alarm Station, and vault heat detection system and plenum heat detectors. Also included is Glovebox overhear testing.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	60.00	Hours
	Factors	5	Hours per week	12	GB O/H Tests per year	1	RCT		
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	120.00	Hours
	Factors	5	Hours per Test	12	GB O/H Tests per year	2	Process Specialist		
	A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	K263S	Fire Tactical Operations	Linear	136,000.00	Dollars
	Factors	1	refer to letter Brad Smeaton to Mike	136000	dollars lump sum	1	Letter number BES-081-98		

Line Item A07 - Criticality Safety Operations

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item
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level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Criticality Safety Operations:
Criticality Safety Inspections are required monthly for JH98/NSP-10; quarterly per 5B02 and annually.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	432.00	Hours
Factors	1	Process Specialists	12 Monthly Surveillances	36 hours per Surveillance (JH98/NSP-			
750		STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	216.00	Hours
Factors	2	Process Specialists	4 Quarterly Surveillances	27 Hours per quarterly surveillance			
750		STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	40.00	Hours
Factors	40	hours per annual surveillance	1 Process Specialist				
A5H		SUBCONTRACTED SRVS	0000 NONE	K399S Building 776 Project	Linear	17.000.00	Dollars
Factors	5	Inspectors	40 Hours	85 \$/Hour			

Line Item A08 - OSR Compensatory Measures

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - OSR Compensatory Measures: Compensatory measures are invoked in response to Limited Conditions of Operations out-of-tolerance conditions or violation of Operational Safety Requirements (OSR) in the building, and have historically been fire watches for such conditions as out-of-compliance HSP31.11 Material or Heat Detector Deficiencies. The scope is for off-shift fire watch. Assume 34 days of the year will require 24-hour roving fire watches in FY-99 under OSR Compensatory Measures.						
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
751		OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	3,264.00	Hours
Factors	4	Process Specialists	24 hours per month for roving fire watch	34 days per year under OSR			

Line Item A09 - LCO Coordinator

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - LCO Coordinator: The LCO Coordinator performs tracking and trending of LCO, ACs and Unreviewed Safety Questions (USQ) surveillance data; produces notification letters to organizations responsible for performing LCO surveillances; advises such organizations of due/past due surveillances; and maintains LCO files and documentation. This individual also attends shift turnover meetings and plan of the day/week meetings as needed in support of the LCO program; maintains and updates Shift Managers manuals; and updates the Vital Safety Systems (VSS) Status Board.						
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	R100S RMRS Salaried	Linear	936.00	Hours
Factors	4	Hours per day	234 days				

Line Item A10 - Routine Radiological Surveys

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Routine Radiological Surveys: Routine Radiological Surveys (i.e., pre-job, weekly, monthly, quarterly, semi-annual, etc.) are performed per the Site radiological Control Manual in order to ensure the safety of personnel, the facility, and the environment. The surveys include gamma-neutron, contamination control, baseline and ALARA exposure, glovebox, and/or room surveys.						
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	30.00	Hours
Factors	2	Surveys per Year	3 Hours per set Survey (From walk-	5 Tank Sets			
750		STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	36.00	Hours
Factors	2	Source Inventories and Leak Testing	1 RCTs	18 Hours per Survey			

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750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	2,600.00	Hours
Factors	2	Hours per survey (From walk-down)	25	Weekly Surveys	52	Weeks per year		
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	912.00	Hours
Factors	2	Hours per Survey (From walk-down)	12	Months	38	Monthly Surveys		
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	920.00	Hours
Factors	2	Survey events per year	2.5	Hours per survey (From walk-down)	184	Glovebox Surveys		
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	455.80	Hours
Factors	0.1	10% Overtime	4558	RCT hours ST for Routine				

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	16,764.38	Dollars
Factors	16764.4	Dollars			
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	34,617.55	Dollars
Factors	34617.6	Dollars			

Activity ID: 1DXXXFM00 Description: End of B776/777 Compliance Surv- Other

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Fire Inspections	0.66	ea	HC	356	234	6,751	0	0	6,751	1,904	8,655
M02	SAAM/CAM Surveillance	0.66	ea	HC	1,287	847	18,528	0	0	18,528	5,225	23,753
M03	Hood Encl./Portable Down Draft Face Velocity Surv.	0.66	ea	HC	297	195	4,256	0	0	4,256	1,200	5,456
M04	Airhead Surveys/Change Filter Media	0.66	ea	HC	1,495	984	21,636	0	0	21,636	6,101	27,737
M05	Annual Smoke Test	0.66	ea	HC	572	376	12,511	0	0	12,511	3,528	16,039
M06	Eve wash/Safety Shower	0.66	ea	HC	90	59	1,211	0	0	1,211	342	1,553
M07	Safety Inspections	0.66	ea	HC	0	0	0	24,921	0	24,921	0	24,921
M10	NDA Gamma Scans	1.32	ea	HC	292	384	8,533	0	0	8,533	2,406	10,940
M11	DOP Filter Surveillance	0.66	ea	HC	540	355	7,778	0	0	7,778	2,193	9,971
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	18,388	18,388	0	18,388
Total for Activity 1DXXXFM00:						3,435	81,205	24,921	18,388	124,514	22,900	147,413

Line Item M01 - Fire Inspections

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of Fire Inspections of the Flammable Cabinets (21 each), Fire Extinguisher Inspections (164) and monthly combustible loading inspections per PR0-035-FI-776/777.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	R100S RMRS Salaried	Linear	216.00	Hours
Factors	1 Engineer	12 monthly inspections			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	42.00	Hours
Factors	0.25 hours per cabinet for monthly	12 months			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	98.40	Hours
Factors	0.05 hours per monthly inspection per	12 months			
		164 Fire Extinguishers			

Line Item M02 - SAAM/CAM Surveillance

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of the LCO Surveillance required to verify the rooms listed in the OSR are covered by an operable Selective Alpha Air Monitor (SAAM) system. This system is used to detect the presence of airborne radioactivity above the alarm point setting of the instrument and to activate an alarm to warn personnel in the area to minimize personnel exposure. A twice-weekly surveillance is performed to visually check operating area SAAMs and recirculation air plenum SAAMs for proper settings and air flow of >.8 cubic feet per minute (cfm) and <3 cfm. Also visually check the operating effluent SAAM for proper SAAM settings and airflow of <2 cfm and <3cfm. Per ROI 4.05, Rev. 1.

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RCTs surveilling 90 SAAM/CAAM units twice per week. During the surveillance, the filter papers are changed.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	1,170.00	Hours
Factors		0.125	hours per surveillance	2	Surveillances per week	52	weeks
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	117.00	Hours
Factors		0.1	10% overtime per week (based on	1	RCT	1170	hours straight time CAM/SAAM

Line Item M03 - Hood Encl./Portable Down Draft Face Velocity Surv.

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
		Item Desc - This activity consists of the LCO Surveillance of the minimum face velocity on Zone 1A enclosures (gloveboxes, hoods and downdraft tables). A monthly surveillance is performed by Radiologica Control Technicians (RCTs) to either verify the enclosure minimum average face velocity >150 fpm or document that any loose surface alpha contamination is <200 dpm/100 cm2 in each Zone 1A enclosure. Operability of Zones 1 1A, and II ventilation systems is needed to maintain negative pressure and to mitigate the release of radioactive materials to the environment. Process Specialists open and close hoods and b-boxes for the RCTs.					

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	90.00	Hours
Factors		0.5	hours per hood surveillance (From	12	months	15	hood surveillances per month
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	90.00	Hours
Factors		0.5	hours per survey (From walk-down)	12	months	15	Portable Downdraft Surveillances per
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	90.00	Hours
Factors		0.5	hours per hood to survey (From walk-	12	months	15	monthly hood surveillances
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	18.00	Hours
Factors		0.1	10% overtime	1	RCT	180	hours per year hood/enclosure
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	9.00	Hours
Factors		0.1	10% overtime	90	ST hours process specialist		

Line Item M04 - Airhead Surveys/Change Filter Media

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
		Item Desc - Inspect and maintain the permanently installed air monitoring system. RCTs perform airhead surveillances.					

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	1,206.40	Hours
Factors		0.08	hours per unit to change (From walk-	2	changes per week	52	weeks
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	138.60	Hours
Factors		0.07	hours per unit calibration per month	12	months	165	Airhead Units requiring calibration
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	134.50	Hours
Factors		0.1	10% overtime	1345	ST hours RCT support airhead		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	15.60	Hours
Factors		0.1	10% overtime	156	hours process specialist ST filter		

Line Item M05 - Annual Smoke Test

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
		Item Desc - This activity consists of RCTs performing tri-annual (not required in FY-99 but is required in FY-00) air flow pattern testing on 90 SAAM/CAM units annually. During this surveillance, special air flow conditions may need to be established (ie. roll-up doors open and/or shut, ventilation systems at reduced flows, etc.) and tested. These tests are performed off-shift to minimize impacts to facility operations.					

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S RMRS Salaried	Linear	16.00	Hours
Factors		16	Hours Foreman time to supervise				

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751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	556.00	Hours
Factors	556	hours RCT time to inspect placement						

Line Item M06 - Eyewash/Safety Shower

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Safety Showers and Eyewash Surveillances ensure that DOE, ANZI, and other requirements are met. Safety Showers and Eyewash Stations are flow tested monthly. A checklist is completed and submitted to the Building Manager for approval. Appropriate documentation is kept on file.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	90.00	Hours
Factors	0.25	hours to inspect per month (From 12 months	30 Eye wash stations			

Line Item M07 - Safety/Inspections

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Safety/Housekeeping Inspections consists of various activities that protect building personnel.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	K399S Building 776 Project	Linear	37.880.00	Dollars
Factors	1	Lump Sum 37880 Dollars				

Line Item M10 - NDA Gamma Scans

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - NDA Gamma Scans are required to determine the Pu gram quantity in fissile solution tanks (2 each).

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KD10H 776 Complex Steelworkers	Linear	40.00	Hours
Factors	1	Annual test 5 Tanks requiring NDA Scans	8 hours per NDA Scan			
	750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KD10H 776 Complex Steelworkers	Linear	252.00	Hours
Factors	18	Hours per Scan 7 Plenums	2 NDA Testing Techs			

Line Item M11 - DOP Filter Surveillance

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - DOP Filter Surveillances are required to determine if plenum filters are operating as designed.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	324.00	Hours
Factors	4	RCTs at each plenum 9 plenums	9 hours each plenum			
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	162.00	Hours
Factors	2	HRTs at each plenum 9 plenums	9 hours each plenum			
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	36.00	Hours
Factors	4	RCTs at each plenum 1 Primary plenum	9 hours each plenum			
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	18.00	Hours
Factors	2	HRTs at each plenum 1 Primary plenum	9 hours each plenum			

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	5.999.45	Dollars
Factors	5999.45	Dollars				

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ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	12,388.54	Dollars
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Factors 12388.5 Dollars

Activity ID: 1DXXXXFE00 Description: End of B776/777 Compliance Surv- Environmental

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
E01	RCRA Inspections	0.66	ea	HC	1.902	1.251	29.832	0	0	29.832	8.413	38.244
E02	Organic Air Emission Surveillance	0.66	each	HC	108	71	1.454	0	0	1.454	410	1.864
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5.716	5.716	0	5.716
Total for Activity 1DXXXXFE00:						1.322	31.286	0	5.716	37.002	8.823	45.824

Line Item E01 - RCRA Inspections

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - RCRA Inspections for B776/777 include daily inspections of tank systems including process waste tanks (Process Waste Tanks, Tank T1 and T2, SR3, SR4, and SR5, T344, T345, T360, T370 and the FBI Pilot Tanks); Monthly and Annual organic inspection of vacuum accumulators; and weekly inspections of 776.1 and 777.1 Units. The subcontracted support contains 776.1 and 777.1 RCRA Unit Inspections, WEMS Management support, container management and regulatory interface and support from the WEMS Coordinator.
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	702.00	Hours
Factors	1 Process Specialist	234 AWS Daily Inspections for Tanks	3 hours per day (From walk-down)			
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	52.00	Hours
Factors	1 Hour per week to inspect the 90 day	1 Process Specialist	52 weeks			
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	624.00	Hours
Factors	12 hours per inspection	52 weeks	1 Perform weekly inspections			
751	OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	524.00	Hours
Factors	1 Process Specialist	131 AWS Fridays and weekends	4 Hours per day (From walk-down)			

Line Item E02 - Organic Air Emission Surveillance

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Organic Air Emission Surveillance
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	108.00	Hours
Factors	1 Surveillance/Month	9 Hours	12 Months	1 Process Specialist		

Line Item SYS - Contingency And Escalation

BOE						
Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1.864.95	Dollars
Factors	1864.96 Dollars					
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	3.851.03	Dollars
Factors	3851.03 Dollars					

WBS No: 1DAB02 Title: B776 Maintenance

Activity ID: 1DF0200C01 Description: B776/777 Landlord - Corrective Maintenance FY-00

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
C01	Modification Packages (LSDW.701Vent. SRV)	3.00	Mod Pkgs	HC	1.675	5.026	105.167	146.132	0	251.299	63.590	314.889
C02	SWP Packages	36.00	SWP Pkgs	HC	38	1.364	29.562	17.871	0	47.433	14.426	61.859
C03	Level of Effort Packages	40.00	LOE Pkgs	HC	12	477	9.904	2.696	0	12.600	4.833	17.433
C04	IWCP Pkgs (Davis Bacon 430AL. Breath Air. 701. Co)	5.00	IWCP Pkgs	HC	96	480	11.275	210.000	0	221.275	5.502	226.778
C05	Maintenance Infrastructure	1.00	FY	HC	1.950	1.950	51.161	18.060	0	69.221	24.967	94.188
Total for Activity 1DF0200C01:						9.297	207.068	394.759	0	601.828	113.318	715.146

WBS No: 1DAB02
Activity ID: 1DF0200C01

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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WBS Filter 1DAB
Activity Filter *

Starts In FY *

Line Item C01 - Modification Packages (LSDW,701Vent, SRV)

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Repairs to VSS/Non-VSS systems that cannot be accomplished using a standard work package (SWP). This work requires engineering review, for example: Work requiring a breach of Zone 1 containment.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	43.20	Hours
	Factors	36 Hours		1.2 20% for JHA and walkdowns					
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	K777C	Construction	Linear	1.440.00	Hours
	Factors	1440 Hours	8 D&D workers, 1 foreman @						
	750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	0.60	Hours
	Factors	0.5 Hours		1.2 20% for JHA and walkdowns					
	750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	12.00	Hours
	Factors	10 Hours		1.2 20% for JHA and walkdowns					
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	48.00	Hours
	Factors	40 Hours		1.2 20% for JHA and walkdowns					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	43.20	Hours
	Factors	36 Hours		1.2 20% for JHA and walkdowns					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	21.60	Hours
	Factors	18 Hours		1.2 20% for JHA and walkdowns					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	21.60	Hours
	Factors	18 Hours		1.2 20% for JHA and walkdowns					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	21.60	Hours
	Factors	18 Hours		1.2 20% for JHA and walkdowns					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	10.80	Hours
	Factors	9 Hours		1.2 20% for JHA and walkdowns					
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	2.59	Hours
	Factors	2.16 Hours		1.2 20% for JHA and walkdowns					
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2.88	Hours
	Factors	2.4 Hours		1.2 20% for JHA and walkdowns					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
	Factors	1.08 Hours		1.2 20% for JHA and walkdowns					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.59	Hours
	Factors	2.16 Hours		1.2 20% for JHA and walkdowns					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.67	Hours
	Factors	0.56 Hours		1.2 20% for JHA and walkdowns					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
	Factors	1.08 Hours		1.2 20% for JHA and walkdowns					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
	Factors	1.08 Hours		1.2 20% for JHA and walkdowns					
	A57	LATA	E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Project	Linear	576.00	Dollars
	Factors	480 Dollars		1.2 20% for JHA and WD					
	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	3.052.80	Dollars
	Factors	2544 Dollars		1.2 20% for JHA and walkdowns					
	A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	2.082.00	Dollars
	Factors	2082 Dollars							
	A5C	SUPPLIES	0000	NONE	K777S	Construction	Linear	43.000.00	Dollars
	Factors	43000 Dollars	material supplies each of						

Line Item C02 - SWP Packages

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

WBS No: 1DAB02
Activity ID: 1DF0200C01

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Item Description: Standard Work Packages (SWPs) are pre-approved IWCP work packages used for trouble-shooting and repair of VSS/Non-VSS systems and components that meet the requirements of NSM 4.03. Engineering support is required for SWPs.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	9.10	Hours
Factors	21 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	0.22	Hours
Factors	0.5 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C210S Facilities Mamt & Maintenance	Linear	0.87	Hours
Factors	2 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	3.90	Hours
Factors	9 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	4.33	Hours
Factors	10 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	4.33	Hours
Factors	10 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	9.10	Hours
Factors	21 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	3.90	Hours
Factors	9 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	0.55	Hours
Factors	1.26 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	751 OVERTIME BASE & PRE.	P170 OTHER ADMINISTRATIVE & PROFE	C210S Facilities Mamt & Maintenance	Linear	0.05	Hours
Factors	0.12 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	0.23	Hours
Factors	0.54 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.26	Hours
Factors	0.6 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.26	Hours
Factors	0.6 hour OT per package	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.55	Hours
Factors	1.26 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.23	Hours
Factors	0.54 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	A57 LATA	P070 COST ESTIMATORS PLANNERS AN	K399S Building 776 Project	Linear	15.60	Dollars
Factors	36 Dollars	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	A57 LATA	P070 COST ESTIMATORS PLANNERS AN	K399S Building 776 Project	Linear	259.75	Dollars
Factors	599.283 Dollars	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	221.05	Dollars
Factors	510 dollars	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			

Line Item C03 - Level of Effort Packages

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Description - LOE Packages are used for repairs to VSS/Non-VSS systems using "skill of the craft" and "like for like" materials, but do not meet the criteria of the IWCP definition of "minor maintenance". Packages are reviewed and approved by the appropriate disciplines per the requirements of IWCP and no engineering or modifications to the equipment are required. Example (VSS fan belt change)

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	3.12	Hours
Factors	7.2 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	0.22	Hours
Factors	0.5 Hours	1.2 20% forJHA and walkdowns	0.3612 82/227 Days Remaining			

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Activity ID: 1DF0200C01

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750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.56	Hours
Factors	3.6	Hours	1.2	20% forJHA and walkdowns	0.3612	82/227 Days Remaining		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.56	Hours
Factors	3.6	Hours	1.2	20% forJHA and walkdowns	0.3612	82/227 Days Remaining		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.56	Hours
Factors	3.6	Hours	1.2	20% forJHA and walkdowns	0.3612	82/227 Days Remaining		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	3.12	Hours
Factors	7.2	Hours	1.2	20% forJHA and walkdowns	0.3612	82/227 Days Remaining		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.78	Hours
Factors	1.8	Hours	1.2	20% forJHA and walkdowns	0.3612	82/227 Days Remaining		
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	67.40	Dollars
Factors	155.5	Dollars	1.2	20% forJHA and walkdowns	0.3612	82/227 Days Remaining		

Line Item C04 - IWCP Pkgs (Davis Bacon 430AL, Breath Air, 701, Co)

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - IWCP Packages covered under Davis Bacon criteria.

Resources	Cost Element			Skill		Department		Curve	Quantity	Units		
	750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE		R100S	RMRS Salaried		Linear	48.00	Hours
	Factors	40	hours per package	1.2		20% forJHA and walkdowns						
	750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI		KD10H	776 Complex Steelworkers		Linear	48.00	Hours
	Factors	40	Hours	1.2		20% forJHA and walkdowns						
	A5C	SUPPLIES		0000	NONE		K399S	Building 776 Project		Linear	6.000.00	Dollars
	Factors	5000	Dollars in supplies for each DB IWCP	1.2		20% forJHA and walkdowns						
	A5H	SUBCONTRACTED SRVS		0000	NONE		K399S	Building 776 Project		Linear	36.000.00	Dollars
	Factors	30000	dollars	1.2		20% forJHA and walkdowns						

Line Item C05 - Maintenance Infrastructure

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Summary Document - Rev 0.
Item Desc - Maintenance Infrastructure comprises management and oversight scope that can not reasonably or effectively be allocated to specific maintenance packages.

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1,300.32	Hours
	Factors	2	Pflipsen, Knapp	1800	Hours	0.3612 82/227 Days Remaining				
	750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	650.16	Hours
	Factors	1	Senior specialist - Vanzant	1800	Hours	0.3612 82/227 Days Remaining				
	A5C	SUPPLIES		0000	NONE	K399S	Building 776 Project	Linear	18,060.00	Dollars
	Factors	50000	Dollars			0.3612 82/227 Days Remaining				

Activity ID: 1DF0200P01 Description: B776/777 Landlord - Preventative Maint FY-00

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
P01	PMO's Carpenter Support	192.00	PMO	HC	1	139	2,838	0	0	2,838	1,385	4,223
P01A	PMO's Electrician Support	360.00	PMO	HC	1	260	5,625	0	0	5,625	2,745	8,370
P01B	PMO's Machinist Support	520.00	PMO	HC	1	376	7,686	0	0	7,686	3,751	11,436
P01C	PMO's SSOC Pipefitter Support	50.00	PMO	HC	3	163	3,326	0	0	3,326	1,623	4,948
P01D	PMO's Alarms Support	100.00	PMO	HC	3	325	7,031	0	0	7,031	3,431	10,463
P01E	PMO's Site Services Pipefitter Support	9.00	PMO	HC	6	52	1,064	0	0	1,064	519	1,584
P01G	Supplies	1.00	each	HC	0	0	0	3,905	0	3,905	0	3,905
P02A	UPS / Elevator Maintenance	1.00	ea	VQ	23	23	500	3,215	0	3,715	244	3,959
P02B	Maintenance Services	1.00	each	HC	0	0	0	7,448	0	7,448	0	7,448

WBS No: 1DAB02
Activity ID: 1DF0200P01

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P02C	Refrigeration	12.00	each	HC	6	69	1,419	0	0	1,419	692	2,111
P03	Calibrations	1.00	ea	HC	675	675	16,270	0	0	16,270	7,940	24,210
Total for Activity 1DF0200P01:						2,082	45,759	14,567	0	60,326	22,330	82,657

Line Item P01 - PMO's Carpenter Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Carpenter Support for Preventative Maintenance Orders (e.g., Perform routine inspections of 16 hoists/rigging monthly and annually - which serves as a monthly.)											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	2	Hours/ea	0.3612	82/227	Days remaining			

Line Item P01A - PMO's Electrician Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Electrician Support for Preventative Maintenance Orders (e.g., Perform routine, monthly inspections of emergency lighting, batteries, fork truck, fork truck batteries & outside lighting).											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	2	Hours/ea	0.3612	82/227	Days remaining			

Line Item P01B - PMO's Machinist Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Machinist Support for Preventative Maintenance Orders (e.g., Perform routine, monthly inspections of HVAC equipment, fan belt inspections and vibration analysis.)											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	2	Hours/ea	0.3612	82/227	Days remaining			

Line Item P01C - PMO's SSOC Pipefitter Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Pipefitter Support for Preventative Maintenance Orders (e.g., Perform routine quarterly and annual inspections of Anti freeze loops (8), and annual fire suppression systems (8).)											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	3.25	Hours
Factors	9	Hours/ea	0.3612	82/227	Days remaining			

Line Item P01D - PMO's Alarms Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Alarms Support for Preventative Maintenance Orders (e.g., Perform routine monthly, quarterly and annual inspections of Fire panels & LSDW batteries.)											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	3.25	Hours
Factors	9	Hours/ea	0.3612	82/227	Days remaining			

Line Item P01E - PMO's Site Services Pipefitter Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item											
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WBS No: 1DAB02
Activity ID: 1DF0200P01

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level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Pipefitter Support for Preventative Maintenance Orders (e.g., Perform annual inspections of Backflow preventors (9).)

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	5.78Hours
Factors	16	Hours/ea	0.3612	82/227 Days remaining			

Line Item P01G - Supplies

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Materials & Supplies required for Preventative Maintenance Orders.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	3.904.57Dollars
Factors	10810	Dollars	0.3612	82/227 Days remaining			

Line Item P02A - UPS / Elevator Maintenance

BOE Item Description: Semi-annual inspections of the B776/777 freight elevator and Uninterruptable Power Supply (UPS).

Vendor Name - Certified Elevator Co.
Vendor Quote - 8,700 (\$5,200 elevator, \$3,500 UPS inspection)
Quote Received by - Procurement
Item being quoted - Elevator and UPS Inspections
Other Info - This contract was in place for FY-98
Availability - Other support costs are based on Estimator Judgement

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	23.12Hours
Factors	2	Inspections	32	Hours	0.3612	82/227 Days remaining	
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	72.24Dollars
Factors	200	Dollars in supplies	0.3612	82/227 Days remaining			
A5H	SUBCONTRACTED SRVS	0000	NONE	K399S	Building 776 Project	Linear	1.878.24Dollars
Factors	2	Semiannual Inspection of elevator	2600	dollars	0.3612	82/227 Days remaining	
A5H	SUBCONTRACTED SRVS	0000	NONE	K399S	Building 776 Project	Linear	1.264.20Dollars
Factors	1	Annual inspection of UPS	3500	Dollars	0.3612	82/227 Days remaining	

Line Item P02B - Maintenance Services

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Maintenance Services performed in support of B776/777 for inspection of chillers (performed by York International on a service contract), and air dryers and compressors (both performed by Cate Colorado Equipment Co.) Supplies are reimbursable costs to be provided by the subcontractor. They are being planned as A5C to differentiate between service costs and forecast supplies.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	903.00Dollars
Factors	2500	Dollars in supplies for all	0.3612	82/227 Days remaining			
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	3.018.19Dollars
Factors	4	Air Compressors	2089	Dollars per inspection performed by	0.3612	82/227 Days remaining	
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	2.017.66Dollars
Factors	2	Chillers	2793	Dollars per Chiller performed by York	0.3612	82/227 Days remaining	
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	1.509.09Dollars
Factors	2	Air Dryers	2089	Dollars per inspection	0.3612	82/227 Days remaining	

Line Item P02C - Refrigeration

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

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Item Desc - Refrigeration Maintenance Support provided by "Ingersoll-Rand".

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	5.78Hours
Factors	16	Hours/ea	0.3612	82/227 Days remaining			

Line Item P03 - Calibrations

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.						
	Item Desc - Calibration Support for Preventative Maintenance Orders (Calibration of installed instrumentation and M & TE are funded in this work package to ensure an accurate indication of building conditions and for performance assurance during maintenance activities.)						
	Calibrations include Zone 1 Utility Loops, Magahelics on Gloveboxes, and controllers on the HVAC system and other safety related calibrations.						

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C100S	Closure Site Services	Linear	81.27Hours
Factors	225	Hours	0.3612	82/227 Days remaining			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C100S	Closure Site Services	Linear	72.24Hours
Factors	200	Hours	0.3612	82/227 Days remaining			
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	36.12Hours
Factors	100	Hours	0.3612	82/227 Days remaining			
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	438.86Hours
Factors	1215	Hours	0.3612	82/227 Days remaining			
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	9.03Hours
Factors	25	Hours	0.3612	82/227 Days remaining			
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	37.56Hours
Factors	104	Hours	0.3612	82/227 Days remaining			

Activity ID: 1DF0200R01 Description: B776/777 Landlord - Routine Maintenance FY-00

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Replace Pressure Release Valves	5.00	Valves	HC	7	33	678	181	0	859	331	1,189
R01	Minor Maintenance Packages	1,000.00	Maint Pkgs	HC	3	2,890	61,598	22,593	0	84,191	30,060	114,251
Total for Activity 1DF0200R01:						2,923	62,276	22,774	0	85,050	30,391	115,440

Line Item M01 - Replace Pressure Release Valves

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.						
	Item Desc - Pressure Release Valve Replacement -Replace all 84 existing PRV's on the plant air/instrument air system and steam system every 3 yrs (each)						

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C210S	Facilities Mamt & Maintenance	Linear	0.09Hours
Factors	0.25	Hours	0.3612	82/227 Days remaining			
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	0.72Hours
Factors	2	Hours	0.3612	82/227 Days remaining			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	5.78Hours
Factors	16	Hours	0.3612	82/227 Days remaining			
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	36.12Dollars
Factors	100	In supplies per PRV	0.3612	82/227 Days remaining			

Line Item R01 - Minor Maintenance Packages

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.						
	Item Desc - Craft Support for the completion of Minor Maintenance activities.						

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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	0.58	Hours
Factors	1.6 Hours	0.3612 82/227 Days remaining				
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	0.18	Hours
Factors	0.5 Hours	0.3612 82/227 Days remaining				
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	0.54	Hours
Factors	1.5 Hours	0.3612 82/227 Days remaining				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.29	Hours
Factors	0.8 Hours	0.3612 82/227 Days remaining				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.29	Hours
Factors	0.8 Hours	0.3612 82/227 Days remaining				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.14	Hours
Factors	0.4 Hours	0.3612 82/227 Days remaining				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.58	Hours
Factors	1.6 Hours	0.3612 82/227 Days remaining				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.29	Hours
Factors	0.8 Hours	0.3612 82/227 Days remaining				
	A57 LATA	P070 COST ESTIMATORS PLANNERS AN	K399S Building 776 Project	Linear	10.84	Dollars
Factors	30 Dollars	0.3612 82/227 Days remaining				
	A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	11.76	Dollars
Factors	32.55 Dollars	0.3612 82/227 Days remaining				

Activity ID: 1DF0201C00 Description: B776/777 Landlord - Corrective Maintenance FY-01

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
C01	Modification Packages	10.00	Mod Pkgs	HC	235	2,352	52,043	61,272	0	113,315	24,825	138,140
C02	SWP Packages	36.00	SWP Pkgs	HC	102	3,685	79,423	49,476	0	128,899	37,885	166,784
C03	Level of Effort Packages	40.00	LOE Pkgs	HC	33	1,320	27,419	13,224	0	40,643	13,079	53,721
C04	IWCP Pkgs (Davis Bacon Covered)	5.00	IWCP Pkgs	HC	96	480	11,275	270,000	0	281,275	5,378	286,653
C05	Maintenance Infrastructure	1.00	FY	HC	5,400	5,400	141,642	114,750	0	256,392	67,563	323,955
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	51,274	51,274	0	51,274
Total for Activity 1DF0201C00:						13,237	311,802	508,722	51,274	871,798	148,729	1,020,527

Line Item C01 - Modification Packages

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Repairs to VSS/Non-VSS systems that cannot be accomplished using a standard work package (SWP). This work requires engineering review example: Work requiring breach of Zone 1 containment. (each)
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	43.20	Hours
Factors	36 Hours	1.2 20% for JHA and walkdowns				
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	0.60	Hours
Factors	0.5 Hours	1.2 20% for JHA and walkdowns				
	750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	R100S RMRS Salaried	Linear	12.00	Hours
Factors	10 Hours	1.2 20% for JHA and walkdowns				
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	48.00	Hours
Factors	40 Hours	1.2 20% for JHA and walkdowns				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	43.20	Hours
Factors	36 Hours	1.2 20% for JHA and walkdowns				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	21.60	Hours
Factors	18 Hours	1.2 20% for JHA and walkdowns				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	21.60	Hours
Factors	18 Hours	1.2 20% for JHA and walkdowns				

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750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	21.60	Hours
Factors	18	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	10.80	Hours
Factors	9	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	2.59	Hours
Factors	2.16	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	2.88	Hours
Factors	2.4	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.59	Hours
Factors	2.16	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.67	Hours
Factors	0.56	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08	Hours	1.2	20% forJHA and walkdowns				
A57	LATA	E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Project	Linear	576.00	Dollars
Factors	480	Dollars	1.2	20% forJHA and walkdowns				
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	3,052.80	Dollars
Factors	2544	Dollars	1.2	20% forJHA and walkdowns				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	2,498.40	Dollars
Factors	2082	Dollars	1.2	20% forJHA and walkdowns				

Line Item C02 - SWP Packages

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Description: Standard Work Packages (SWPs) are pre-approved IWCP work packages used for trouble-shooting and repair of VSS/Non-VSS systems and components that meet the requirements of NSM 4.03. Engineering support is required for SWPs.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	25.20	Hours
Factors	21	Hours	1.2 20% for JHA and walkdowns						
750	STRAIGHT TIME BASE		E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	0.60	Hours
Factors	0.5	Hours	1.2 20% for JHA and walkdowns						
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	10.80	Hours
Factors	9	Hours	1.2 20% for JHA and walkdowns						
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
Factors	10	Hours	1.2 20% for JHA and walkdowns						
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
Factors	10	Hours	1.2 20% for JHA and walkdowns						
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	25.20	Hours
Factors	21	Hours	1.2 20% for JHA and walkdowns						
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	10.80	Hours
Factors	9	Hours	1.2 20% for JHA and walkdowns						
751	OVERTIME BASE & PRE.		C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	1.51	Hours
Factors	1.26	Hours	1.2 20% for JHA and walkdowns						
751	OVERTIME BASE & PRE.		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	0.65	Hours
Factors	0.54	Hours	1.2 20% for JHA and walkdowns						
751	OVERTIME BASE & PRE.		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	0.6	Hours	1.2 20% for JHA and walkdowns						
751	OVERTIME BASE & PRE.		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	0.6	hour OT per package	1.2 20% for JHA and walkdowns						

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751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.51	Hours
Factors	1.26	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.65	Hours
Factors	0.54	Hours	1.2	20% forJHA and walkdowns				
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	43.20	Dollars
Factors	36	Dollars	1.2	20% forJHA and walkdowns				
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	719.14	Dollars
Factors	599.283	Dollars	1.2	20% forJHA and walkdowns				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	612.00	Dollars
Factors	510	dollars	1.2	20% forJHA and walkdowns				

Line Item C03 - Level of Effort Packages

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Description - LOE Packages are used for repairs to VSS/Non-VSS systems using "skill of the craft" and "like for like" materials, but do not meet the criteria of the IWCP definition of "minor maintenance". Packages are reviewed and approved by the appropriate disciplines per the requirements of IWCP and no engineering or modifications to the equipment are required. Example (VSS fan belt change)

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	8.64	Hours
Factors	7.2	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	0.60	Hours
Factors	0.5	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours
Factors	3.6	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours
Factors	3.6	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours
Factors	3.6	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	8.64	Hours
Factors	7.2	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.16	Hours
Factors	1.8	Hours	1.2	20% forJHA and walkdowns				
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	144.00	Dollars
Factors	120	Dollars	1.2	20% forJHA and walkdowns				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	186.60	Dollars
Factors	155.5	Dollars	1.2	20% forJHA and walkdowns				

Line Item C04 - IWCP Pkgs (Davis Bacon Covered)

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - IWCP Packages covered under Davis Bacon criteria.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	48.00	Hours
Factors	40	hours per package	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	48.00	Hours
Factors	40	Hours	1.2	20% forJHA and walkdowns				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	6,000.00	Dollars
Factors	5000	Dollars in supplies for each DB IWCP	1.2	20% forJHA and walkdowns				
A5H	SUBCONTRACTED SRVS	0000	NONE	K399S	Building 776 Project	Linear	48,000.00	Dollars
Factors	40000	dollars	1.2	20% forJHA and walkdowns				

Line Item C05 - Maintenance Infrastructure

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item

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level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Summary Document - Rev 0.

Item Desc - Maintenance Infrastructure comprises management and oversight scope that can not reasonably or effectively be allocated to specific maintenance packages.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	3.600.00	Hours
	Factors	2	Pflopsen. Knapp	1800	Hours				
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1.800.00	Hours
	Factors	1	Senior specialist - Vanzant	1800	Hours				
	A5C	SUPPLIES	0000	NONE	K399S	Buildina 776 Proiect	Linear	114.750.00	Dollars
Factors	114750	Dollars							

Line Item SYS - Contingency And Escalation

BOE											
Resources	Cost Element			Skill		Department		Curve	Quantity	Units	
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department		Linear	30.892.45	Dollars
	Factors		30892.5 Dollars								
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department		Linear	20.381.23	Dollars
	Factors		20381.2 Dollars								

Activity ID: 1DF0201M00 Description: B776/777 Landlord - Major IWCP's

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Major IWCPs (Install 2 Chillers)	1.00	ea	HC	18	18	375	300.000	0	300.375	179	300.554
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	15.899	15.899	0	15.899
Total for Activity 1DF0201M00:						18	375	300.000	15.899	316.275	179	316.454

Line Item M01 - Major IWCPs (Install 2 Chillers)

BOE		Historical Data Source - The historical data is from the FY99 actual costs for the procurement and installation of a new chiller. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
		Item Desc - Procure and install two additional chillers to replace the chiller to be removed from the compressor house. Two chillers are required to take the volumetric throughput of the existing chiller that is to be taken out of service in FY-01.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C210S	Facilities Mamt & Maintenance	Linear	0.25	Hours
	Factors	0.25 Hours							
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2.00	Hours
	Factors	2 Hours							
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
	Factors	16 Hours							
	A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	300.000.00	Dollars
	Factors	300000 dollare to procure and install the two							

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	9,579.40	Dollars
	Factors		9579.4 Dollars							
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	6,319.99	Dollars
	Factors		6319.99 Dollars							

Activity ID: 1DF0201P00 Description: B776/777 Landlord - Preventative Maint FY-01

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
P01	PMO's Carpenter Support	192.00	PMO	HC	2	384	7.857	0	0	7.857	3.748	11.604

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P01A	PMO's Electrician Support	360.00	PMO	HC	2	720	15.574	0	0	15.574	7.429	23.002
P01B	PMO's Machinist Support	520.00	PMO	HC	2	1,040	21.278	0	0	21.278	10.150	31.428
P01C	PMO's SSOC Pipefitter Support	50.00	PMO	HC	9	450	9.207	0	0	9.207	4.392	13.599
P01D	PMO's Alarms Support	100.00	PMO	HC	9	900	19.467	0	0	19.467	9.286	28.753
P01E	PMO's Site Services Pipefitter Support	9.00	PMO	HC	16	144	2.946	0	0	2.946	1.405	4.352
P01G	Supplies	1.00	each	HC	0	0	0	10.810	0	10.810	0	10.810
P02A	UPS / Elevator Maintenance	1.00	ea	VQ	64	64	1.384	8.900	0	10.284	660	10.945
P02B	Maintenance Services	1.00	each	HC	0	0	0	20.620	0	20.620	0	20.620
P02C	Refrigeration	12.00	each	HC	16	192	3.928	0	0	3.928	1.874	5.802
P03	Calibrations	1.00	ea	HC	1,869	1,869	45.045	0	0	45.045	21.486	66.531
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	12.032	12.032	0	12.032
Total for Activity 1DF0201P00:						5,763	126,686	40,330	12,032	179,048	60,429	239,478

Line Item P01 - PMO's Carpenter Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Carpenter Support to Preventative Mtce Orders (Perform routine inspections of hoist/rigging each month and an annual inspection - which serves as a monthly - 16 hoists) (each)											
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.00 Hours
Factors		2	Hours/ea				

Line Item P01A - PMO's Electrician Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Electrician Support for Preventative Maintenance Orders (e.g., Perform routine, monthly inspections of emergency lighting, batteries, fork truck, fork truck batteries & outside lighting).											
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	2.00 Hours
Factors		2	Hours/ea				

Line Item P01B - PMO's Machinist Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Machinist Support for Preventative Maintenance Orders (e.g., Perform routine, monthly inspections of HVAC equipment, fan belt inspections and vibration analysis.)											
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.00 Hours
Factors		2	Hours/ea				

Line Item P01C - PMO's SSOC Pipefitter Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Pipefitter Support for Preventative Maintenance Orders (e.g., Perform routine quarterly and annual inspections of Anti freeze loops (8), and annual fire suppression systems (8).)											
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	9.00 Hours
Factors		9	Hours/ea				

Line Item P01D - PMO's Alarms Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item											
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level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - Alarms Support for Preventative Maintenance Orders - Perform routine monthly, quarterly and annual inspections of Fire panels & LSDW batteries.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	9.00	Hours
	Factors 9 Hours/ea								

Line Item P01E - PMO's Site Services Pipefitter Support

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - Pipefitter Support Item Desc - Pipefitter Support for Preventative Maintenance Orders -Perform annual inspections of Backflow preventors (9).

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
	Factors	16	Hours/ea						

Line Item P01G - Supplies

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - Materials & Supplies required for Preventative Maintenance Orders.

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES		0000	NONE	K399S	Building 776 Project	Linear	10.810.00	Dollars
	Factors	10810	Dollars							

Line Item P02A - UPS / Elevator Maintenance

BOE Item Description: Semi-annual inspections of the B776/777 freight elevator and Uninterruptable Power Supply (UPS).
Vendor Name - Certified Elevator Co.
Vendor Quote - 8,700 (\$5,200 elevator, \$3,500 UPS inspection)
Quote Received by - Procurement
Item being quoted - Elevator and UPS Inspections
Other Info - This contract was in place for FY-98
Availability - Other support costs are based on Estimator Judgement

Resources	Cost Element			Skill		Department		Curve	Quantity	Units	
	750	STRAIGHT TIME BASE		C020	ELECTRICIANS		C211S	Electrical Maintenance	Linear	64.00	Hours
	Factors	2	Inspections		32	Hours					
	A5C	SUPPLIES		0000	NONE		K399S	Building 776 Project	Linear	200.00	Dollars
	Factors	200	Dollars in supplies								
	A5H	SUBCONTRACTED SRVS		0000	NONE		K399S	Building 776 Project	Linear	5,200.00	Dollars
	Factors	2	Semiannual inspection of elevator		2600	dollars					
	A5H	SUBCONTRACTED SRVS		0000	NONE		K399S	Building 776 Project	Linear	3,500.00	Dollars
	Factors	1	Annual inspection of UPS		3500	Dollars					

Line Item P02B - Maintenance Services

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - Maintenance Services performed in support of B776/777 for inspection of chillers (performed by York International on a service contract), air dryers and compressors (both performed by Cate Colorado Equipment Co.) Supplies are reimbursable costs to be provided by the subcontractor. They are being planned as A5C to differentiate between service costs and forecast supplies.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	2,500.00	Dollars
	Factors 2500 Dollars in supplies for all								

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A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	8,356.00	Dollars
Factors	4	Air Compressors	2089	Dollars per inspection performed by				
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	5,586.00	Dollars
Factors	2	Chillers	2793	Dollars per Chiller performed by York				
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	4,178.00	Dollars
Factors	2	Air Dryers	2089	Dollars per inspection				

Line Item P02C - Refrigeration

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Refrigeration Maintenance Support (each)A5H is "Ingersoll-Rand".

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
	Factors 16 Hours/ea								

Line Item P03 - Calibrations

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Calibration Support to Preventative Mtce Orders - Calibration of installed instrumentation and M & TE are funded in this work package to ensure an accurate indication of building conditions and for performance assurance during maintenance activities.

Calibrations include Zone 1 Utility Loops, Magahelics on Gloveboxes, and controllers on the HVAC system and other safety related calibrations.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C100S	Closure Site Services	Linear	225.00	Hours
	Factors	225	Hours						
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C100S	Closure Site Services	Linear	200.00	Hours
	Factors	200	Hours						
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	100.00	Hours
	Factors	100	Hours						
	750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	1,215.00	Hours
	Factors	1215	Hours						
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	25.00	Hours
Factors	25	Hours							
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	104.00	Hours	
Factors	104	Hours							

Line Item SYS - Contingency And Escalation

BOE Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	7,249.25	Dollars
	Factors 7249.25 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	4,782.67	Dollars
	Factors 4782.67 Dollars									

Activity ID: 1DF0201R00 Description: B776/777 Landlord - Routine Maintenance FY-01

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Replace Pressure Release Valves	5.00	Valves	HC	18	91	1,877	500	0	2,377	895	3,272
R01	Minor Maintenance Packages	1,000.00	Maint Pkgs	HC	8	8,000	170,537	62,550	0	233,087	81,346	314,433
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	16,807	16,807	0	16,807
Total for Activity 1DF0201R00:						8,091	172,414	63,050	16,807	252,271	82,242	334,512

Line Item M01 - Replace Pressure Release Valves

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item

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level based on FY99 line item to total technical support quotients.

Item Desc - Pressure Release Valve Replacement -Replace PRV's on the plant air/instrument air system and steam system.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C210S Facilities Mamt & Maintenance	Linear	0.25	Hours
Factors		0.25	Hours				
	750	STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	2.00	Hours
Factors		2	Hours				
	750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	16.00	Hours
Factors		16	Hours				
	A5C	SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	100.00	Dollars
Factors		100	In supplies per PRV				

Line Item R01 - Minor Maintenance Packages

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Craft Support for the completion of Minor Maintenance activities.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	1.60	Hours
Factors		1.6	Hours				
	750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	0.50	Hours
Factors		0.5	Hours				
	750	STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	1.50	Hours
Factors		1.5	Hours				
	750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.80	Hours
Factors		0.8	Hours				
	750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.80	Hours
Factors		0.8	Hours				
	750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.40	Hours
Factors		0.4	Hours				
	750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	1.60	Hours
Factors		1.6	Hours				
	750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.80	Hours
Factors		0.8	Hours				
	A57	LATA	P070 COST ESTIMATORS PLANNERS AN	K399S Building 776 Project	Linear	30.00	Dollars
Factors		30	Dollars				
	A5C	SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	32.55	Dollars
Factors		32.55	Dollars				

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	10.126.05	Dollars
Factors		10126.1	Dollars				
	ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	6.680.64	Dollars
Factors		6680.64	Dollars				

Activity ID: 1DF0202C00 Description: B776/777 Landlord - Corrective Maintenance FY-02

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
C01	Modification Packages	8.00	Mod Pkgs	HC	235	1.882	41.635	49.018	0	90.652	14.697	105.349
C02	SWP Packages	36.00	SWP Pkgs	HC	102	3.685	79.423	49.476	0	128.899	28.036	156.935
C03	Level of Effort Packages	40.00	LOE Pkgs	HC	33	1.320	27.419	13.224	0	40.643	9.679	50.321
C04	IWCP Pkgs	5.00	IWCP Pkgs	HC	96	480	11.275	270.000	0	281.275	3.980	285.255

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Activity ID: 1DF0202C00

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C05	Maintenance Infrastructure	1.00	FY	HC	5,400	5,400	141,642	114,750	0	256,392	50,000	306,392
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	134,804	134,804	0	134,804
Total for Activity 1DF0202C00:						12,767	301,393	496,468	134,804	932,665	106,392	1,039,057

Line Item C01 - Modification Packages

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - Repairs to VSS/Non-VSS systems that cannot be accomplished using a standard work package (SWP). This work requires engineering review example: Work requiring breach of Zone 1 containment. (each)											

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	43.20	Hours
Factors	36	Hours	1.2	20% forJHA and walkdowns					
	750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	0.60	Hours
Factors	0.5	Hours	1.2	20% forJHA and walkdowns					
	750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	12.00	Hours
Factors	10	Hours	1.2	20% forJHA and walkdowns					
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	48.00	Hours
Factors	40	Hours	1.2	20% forJHA and walkdowns					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	43.20	Hours
Factors	36	Hours	1.2	20% forJHA and walkdowns					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	21.60	Hours
Factors	18	Hours	1.2	20% forJHA and walkdowns					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	21.60	Hours
Factors	18	Hours	1.2	20% forJHA and walkdowns					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	21.60	Hours
Factors	18	Hours	1.2	20% forJHA and walkdowns					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	10.80	Hours
Factors	9	Hours	1.2	20% forJHA and walkdowns					
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	2.59	Hours
Factors	2.16	Hours	1.2	20% forJHA and walkdowns					
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	2.88	Hours
Factors	2.4	Hours	1.2	20% forJHA and walkdowns					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08	Hours	1.2	20% forJHA and walkdowns					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.59	Hours
Factors	2.16	Hours	1.2	20% forJHA and walkdowns					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.67	Hours
Factors	0.56	Hours	1.2	20% forJHA and walkdowns					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08	Hours	1.2	20% forJHA and walkdowns					
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08	Hours	1.2	20% forJHA and walkdowns					
	A57	LATA	E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Proiect	Linear	576.00	Dollars
Factors	480	Dollars	1.2	20% forJHA and walkdowns					
	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Proiect	Linear	3,052.80	Dollars
Factors	2544	Dollars	1.2	20% forJHA and walkdowns					
	A5C	SUPPLIES	0000	NONE	K399S	Building 776 Proiect	Linear	2,498.40	Dollars
Factors	2082	Dollars	1.2	20% forJHA and walkdowns					

Line Item C02 - SWP Packages

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
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Activity ID: 1DF0202C00

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Project Baseline Devl
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Starts In FY *

Item Desc - Support to SWP Maintenance Packages (each)

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	25.20	Hours
Factors	21 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	0.60	Hours
Factors	0.5 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	10.80	Hours
Factors	9 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
Factors	10 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
Factors	10 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	25.20	Hours
Factors	21 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	10.80	Hours
Factors	9 Hours		1.2 20% forJHA and walkdowns					
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	1.51	Hours
Factors	1.26 Hours		1.2 20% forJHA and walkdowns					
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	0.65	Hours
Factors	0.54 Hours		1.2 20% forJHA and walkdowns					
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	0.6 Hours		1.2 20% forJHA and walkdowns					
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	0.6 hour OT per package		1.2 20% forJHA and walkdowns					
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.51	Hours
Factors	1.26 Hours		1.2 20% forJHA and walkdowns					
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.65	Hours
Factors	0.54 Hours		1.2 20% forJHA and walkdowns					
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	43.20	Dollars
Factors	36 Dollars		1.2 20% forJHA and walkdowns					
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	719.14	Dollars
Factors	599.283 Dollars		1.2 20% forJHA and walkdowns					
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	612.00	Dollars
Factors	510 dollars		1.2 20% forJHA and walkdowns					

Line Item C03 - Level of Effort Packages

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Support to Level of Effort Packages (each)

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	8.64	Hours
Factors	7.2 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	0.60	Hours
Factors	0.5 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours
Factors	3.6 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours
Factors	3.6 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours
Factors	3.6 Hours		1.2 20% forJHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	8.64	Hours
Factors	7.2 Hours		1.2 20% forJHA and walkdowns					

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750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.16	Hours
Factors	1.8	Hours	1.2	20% for JHA and walkdowns				
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	144.00	Dollars
Factors	120	Dollars	1.2	20% for JHA and walkdowns				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	186.60	Dollars
Factors	155.5	Dollars	1.2	20% for JHA and walkdowns				

Line Item C04 - IWCP Pkgs

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - IWCP Packages Davis Bacon Covered (each)

Resources	Cost Element			Skill		Department		Curve	Quantity	Units		
	750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE		R100S	RMRS Salaried		Linear	48.00	Hours
	Factors	40	hours per package	1.2	20% for JHA and walkdowns							
	750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI		KD10H	776 Complex Steelworkers		Linear	48.00	Hours
	Factors	40	Hours	1.2	20% for JHA and walkdowns							
	A5C	SUPPLIES		0000	NONE		K399S	Building 776 Project		Linear	6.000.00	Dollars
	Factors	5000	Dollars in supplies for each DB IWCP	1.2	20% for JHA and walkdowns							
	A5H	SUBCONTRACTED SRVS		0000	NONE		K399S	Building 776 Project		Linear	48.000.00	Dollars
	Factors	40000	dollars	1.2	20% for JHA and walkdowns							

Line Item C05 - Maintenance Infrastructure

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Summary Document - Rev 0.
Item Desc - Maintenance Infrastructure contains management and oversight scope that can not be reasonably or effectively allocated to specific maintenance packages.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	3.600.00	Hours
	Factors	2	Pflipsen Knapp	1800	Hours				
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1.800.00	Hours
	Factors	1	Senior specialist - Vanzant	1800	Hours				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	114.750.00	Dollars	
Factors	114750	Dollars							

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	92.547.45	Dollars
	Factors 92547.5 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	42.257.04	Dollars
	Factors 42257.0 Dollars									

Activity ID: 1DF0202P00 Description: B776/777 Landlord - Preventative Maint FY-02

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
P01	PMO's Carpenter Support	192.00	PMO	HC	2	384	7.857	0	0	7.857	2.773	10.630
P01A	PMO's Electrician Support	360.00	PMO	HC	2	720	15.574	0	0	15.574	5.497	21.071
P01B	PMO's Machinist Support	520.00	PMO	HC	2	1,040	21.278	0	0	21.278	7.511	28.790
P01C	PMO's SSOC Pipefitter Support	50.00	PMO	HC	9	450	9.207	0	0	9.207	3.250	12.457
P01D	PMO's Alarms Support	100.00	PMO	HC	9	900	19.467	0	0	19.467	6.872	26.339
P01E	PMO's Site Services Pipefitter Support	9.00	PMO	HC	16	144	2.946	0	0	2.946	1.040	3.986
P01G	Supplies	1.00	each	HC	0	0	0	10.810	0	10.810	0	10.810
P02A	UPS / Elevator Maintenance	1.00	ea	VQ	64	64	1.384	8.900	0	10.284	489	10.773

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P02B	Maintenance Services	1.00	each	HC	0	0	0	20.620	0	20.620	0	20.620
P02C	Refrigeration	12.00	each	HC	16	192	3.928	0	0	3.928	1.387	5.315
P03	Calibrations	1.00	ea	HC	1.869	1.869	45.045	0	0	45.045	15.901	60.946
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	31.565	31.565	0	31.565
Total for Activity 1DF0202P00:						5.763	126.686	40.330	31.565	198.582	44.720	243.302

Line Item P01 - PMO's Carpenter Support

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Carpenter Support to Preventative Mtce Orders (Perform routine inspections of hoist/rigging each month and an annual inspection - which serves as a monthly - 16 hoists) (each)

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.00	Hours
Factors 2 Hours/ea								

Line Item P01A - PMO's Electrician Support

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Electrician Support to Preventative Mtce Orders (Perform routine, monthly inspections of Emergency lighting, batteries, fork truck, fork truck batteries, Outside lighting).

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	2.00	Hours
Factors 2 Hours/ea								

Line Item P01B - PMO's Machinist Support

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Machinist Support to Preventative Mtce Orders - Perform routine, monthly inspections of HVAC equipment, fan belt inspections and vibration analysis.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.00	Hours
Factors 2 Hours/ea								

Line Item P01C - PMO's SSOC Pipefitter Support

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Pipefitter Support to Preventative Mtce Orders -Perform routine quarterly and annual inspections of Anti freeze loops (8), and annual fire suppression systems (8). (each)

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	9.00	Hours
Factors 9 Hours/ea								

Line Item P01D - PMO's Alarms Support

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Alarms Support to Preventative Mtce Orders - Perform routine monthly, quarterly and annual inspections of Fire panels, LSDW batteries.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	9.00	Hours
Factors 9 Hours/ea								

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Line Item P01E - PMO's Site Services Pipefitter Support

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Pipefitter Support to Preventative Mtce Orders -Perform annual inspections of Backflow preventors (9).

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
Factors	16	Hours/ea						

Line Item P01G - Supplies

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Supplies required for Preventative Mtce Orders.									
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES		0000	NONE	K399S	Building 776 Project	Linear	10.810.00	Dollars
	Factors 10810 Dollars									

Line Item P02A - UPS / Elevator Maintenance

BOE

Vendor Name - Certified Elevator Co.
Vendor Quote - 8,700 (\$5,200 elevator, \$3,500 UPS inspection)
Quote Received by - Procurement
Item being quoted - Elevator and UPS Inspections
Other Info - This contract was in place for FY-98
Availability - Other support costs are based on Estimator Judgement

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	64.00	Hours
Factors	2	Inspections	32	Hours					
A5C	SUPPLIES		0000	NONE	K399S	Building 776 Project	Linear	200.00	Dollars
Factors	200	Dollars in supplies							
A5H	SUBCONTRACTED SRVS		0000	NONE	K399S	Building 776 Project	Linear	5.200.00	Dollars
Factors	2	Semiannual Inspection of elevator	2600	dollars					
A5H	SUBCONTRACTED SRVS		0000	NONE	K399S	Building 776 Project	Linear	3.500.00	Dollars
Factors	1	Annual inspection of UPS	3500	Dollars					

Line Item P02B - Maintenance Services

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Maintenance Services performed in support of B776/777 for inspection of chillers (performed by York International on a service contract), air dryers and compressors (both performed by Cate Colorado Equipment Co.) Supplies are reimbursable costs to be provided by the subcontractor. They are being planned as A5C to differentiate between service costs and forecast supplies.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	2.500.00	Dollars
Factors 2500		Dollars in supplies for all						
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	8.356.00	Dollars
Factors 4		Air Compressors		2089		Dollars per inspection performed by		
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	5.586.00	Dollars
Factors 2		Chillers		2793		Dollars per Chiller performed by York		
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	4.178.00	Dollars
Factors 2		Air Dryers		2089		Dollars per inspection		

Line Item P02C - Refrigeration

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary									
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Item Desc - Refrigeration Maintenance Support provided by "Ingersoll-Rand".

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
	Factors 16 Hours/ea								

Line Item P03 - Calibrations

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Desc - Calibration Support for Preventative Maintenance Orders (Calibration of installed instrumentation and M & TE are funded in this work package to ensure an accurate indication of building conditions and for performance assurance during maintenance activities.)
	Calibrations include Zone 1 Utility Loops, Magahelics on Gloveboxes, and controllers on the HVAC system and other safety related calibrations.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C100S	Closure Site Services	Linear	225.00	Hours
	Factors	225	Hours						
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C100S	Closure Site Services	Linear	200.00	Hours
	Factors	200	Hours						
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	100.00	Hours
	Factors	100	Hours						
	750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	1,215.00	Hours
	Factors	1215	Hours						
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	25.00	Hours
Factors	25	Hours							
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	104.00	Hours	
Factors	104	Hours							

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	21.670.58	Dollars	
	Factors		21670.6 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	9.894.76	Dollars	
	Factors		9894.76 Dollars							

Activity ID: 1DF0202R00 Description: B776/777 Landlord - Routine Maintenance FY-02

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Replace Pressure Release Valves	5.00	Valves	HC	18	91	1,877	500	0	2,377	663	3,040
R01	Minor Maintenance Packages	1,000.00	Maint Pkgs	HC	8	8,000	170,537	62,550	0	233,087	60,200	293,287
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	44,176	44,176	0	44,176
Total for Activity 1DF0202R00:						8,091	172,414	63,050	44,176	279,640	60,862	340,502

Line Item M01 - Replace Pressure Release Valves

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Pressure Release Valve Replacement -Replace existing PRV's on the plant air/instrument air system and steam system

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C210S	Facilities Mamt & Maintenance	Linear	0.25	Hours
Factors		0.25		Hours				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2.00	Hours
Factors		2		Hours				

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750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
Factors	16	Hours						
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	100.00	Dollars
Factors	100	In supplies per PRV						

Line Item R01 - Minor Maintenance Packages

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.
Item Desc - Support to Minor Maintenance Packages

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	1.60	Hours
Factors	1.6	Hours							
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried		Linear	0.50	Hours
Factors	0.5	Hours							
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers		Linear	1.50	Hours
Factors	1.5	Hours							
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	0.80	Hours
Factors	0.8	Hours							
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	0.80	Hours
Factors	0.8	Hours							
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	0.40	Hours
Factors	0.4	Hours							
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	1.60	Hours
Factors	1.6	Hours							
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	0.80	Hours
Factors	0.8	Hours							
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Buildina 776 Proiect		Linear	30.00	Dollars
Factors	30	Dollars							
A5C	SUPPLIES	0000	NONE	K399S	Buildina 776 Proiect		Linear	32.55	Dollars
Factors	32.55	Dollars							

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	30.328.07	Dollars
	Factors 30328.1 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	13.847.75	Dollars
	Factors 13847.8 Dollars								

Activity ID: 1DF0203C00 Description: B776/777 Landlord - Corrective Maintenance FY-03

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
C01	Modification Packages	6.00	Mod Pkgs	HC	235	1,411	31,226	36,763	0	67,989	10,804	78,793
C02	SWP Packages	36.00	SWP Pkgs	HC	102	3,685	79,423	49,476	0	128,899	27,480	156,379
C03	Level of Effort Packages	40.00	LOE Pkgs	HC	33	1,320	27,419	13,224	0	40,643	9,487	50,129
C04	IWCP Pkgs (Davis Bacon Covered)	5.00	IWCP Pkgs	HC	96	480	11,275	270,000	0	281,275	3,901	285,176
C05	Maintenance Infrastructure	1.00	FY	HC	5,400	5,400	141,642	114,750	0	256,392	49,008	305,400
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	242,227	242,227	0	242,227
Total for Activity 1DF0203C00:						12,296	290,984	484,213	242,227	1,017,425	100,681	1,118,105

Line Item C01 - Modification Packages

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.
Item Desc - Repairs to VSS/Non-VSS systems that cannot be accomplished using a standard work package (SWP). This work requires engineering review example: Work requiring breach of Zone 1 containment. (each)

WBS No: 1DAB02
Activity ID: 1DF0203C00

Rockv Flats Closure Project
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	43.20	Hours
Factors	36 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	0.60	Hours
Factors	0.5 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	R100S RMRS Salaried	Linear	12.00	Hours
Factors	10 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	48.00	Hours
Factors	40 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	43.20	Hours
Factors	36 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	21.60	Hours
Factors	18 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	21.60	Hours
Factors	18 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	21.60	Hours
Factors	18 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	10.80	Hours
Factors	9 Hours	1.2 20% forJHA and walkdowns				
	751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	2.59	Hours
Factors	2.16 Hours	1.2 20% forJHA and walkdowns				
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	2.88	Hours
Factors	2.4 Hours	1.2 20% forJHA and walkdowns				
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08 Hours	1.2 20% forJHA and walkdowns				
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	2.59	Hours
Factors	2.16 Hours	1.2 20% forJHA and walkdowns				
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.67	Hours
Factors	0.56 Hours	1.2 20% forJHA and walkdowns				
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08 Hours	1.2 20% forJHA and walkdowns				
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08 Hours	1.2 20% forJHA and walkdowns				
	A57 LATA	E110 QUALITY CONTROL ENGINEERS	K399S Building 776 Project	Linear	576.00	Dollars
Factors	480 Dollars	1.2 20% forJHA and walkdowns				
	A57 LATA	P070 COST ESTIMATORS PLANNERS AN	K399S Building 776 Project	Linear	3.052.80	Dollars
Factors	2544 Dollars	1.2 20% forJHA and walkdowns				
	A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	2.498.40	Dollars
Factors	2082 Dollars	1.2 20% forJHA and walkdowns				

Line Item C02 - SWP Packages

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.
Item Desc - Support to SWP Maintenance Packages (each)

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	25.20	Hours
Factors	21 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	0.60	Hours
Factors	0.5 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	10.80	Hours
Factors	9 Hours	1.2 20% forJHA and walkdowns				
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	12.00	Hours
Factors	10 Hours	1.2 20% forJHA and walkdowns				

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750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
Factors	10	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	25.20	Hours
Factors	21	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	10.80	Hours
Factors	9	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	1.51	Hours
Factors	1.26	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	0.65	Hours
Factors	0.54	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	0.6	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	0.6	hour OT per package	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.51	Hours
Factors	1.26	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.65	Hours
Factors	0.54	Hours	1.2	20% forJHA and walkdowns				
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	43.20	Dollars
Factors	36	Dollars	1.2	20% forJHA and walkdowns				
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	719.14	Dollars
Factors	599.283	Dollars	1.2	20% forJHA and walkdowns				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	612.00	Dollars
Factors	510	dollars	1.2	20% forJHA and walkdowns				

Line Item C03 - Level of Effort Packages

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Support to Level of Effort Packages (each)

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	8.64	Hours
Factors	7.2	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	0.60	Hours
Factors	0.5	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours
Factors	3.6	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours
Factors	3.6	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours
Factors	3.6	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	8.64	Hours
Factors	7.2	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.16	Hours
Factors	1.8	Hours	1.2	20% forJHA and walkdowns				
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	144.00	Dollars
Factors	120	Dollars	1.2	20% forJHA and walkdowns				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	186.60	Dollars
Factors	155.5	Dollars	1.2	20% forJHA and walkdowns				

Line Item C04 - IWCP Pkgs (Davis Bacon Covered)

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - IWCP Packages Davis Bacon Covered (each)

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Activity ID: 1DF0203C00

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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	R100S RMRS Salaried	Linear	48.00	Hours
Factors	40 hours per package	1.2 20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	48.00	Hours
Factors	40 Hours	1.2 20% forJHA and walkdowns				
A5C	SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	6.000.00	Dollars
Factors	5000 Dollars in supplies for each DB IWCP	1.2 20% forJHA and walkdowns				
A5H	SUBCONTRACTED SRVS	0000 NONE	K399S Building 776 Project	Linear	48.000.00	Dollars
Factors	40000 dollars	1.2 20% forJHA and walkdowns				

Line Item C05 - Maintenance Infrastructure

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Maintenance Infrastructure contains management and oversight scope that can not be reasonably or effectively allocated to specific maintenance packages.
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	R100S RMRS Salaried	Linear	1.800.00	Hours
Factors	1 Senior specialist - Vanzant	1800 Hours				
750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	R100S RMRS Salaried	Linear	3.600.00	Hours
Factors	2 Pflipsen, Knapp	1800 Hours				
A5C	SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	114.750.00	Dollars
Factors	114750 Dollars					

Line Item SYS - Contingency And Escalation

BOE												
Resources	Cost Element				Skill		Department		Curve	Quantity	Units	
	CON	CONTINGENCY			0000	NONE	ZDEPT	No Department		Linear	175.059.90	Dollars
	Factors		175060 Dollars									
	ESC	ESCALATION			0000	NONE	ZDEPT	No Department		Linear	67.166.98	Dollars
	Factors		67167 Dollars									

Activity ID: 1DF0203P00 Description: B776/777 Landlord - Preventative Maint FY-03

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
P01	PMO's Carpenter Support	192.00	PMO	HC	2	384	7.857	0	0	7.857	2.718	10.575
P01A	PMO's Electrician Support	360.00	PMO	HC	2	720	15.574	0	0	15.574	5.388	20.962
P01B	PMO's Machinist Support	520.00	PMO	HC	2	1,040	21.278	0	0	21.278	7.362	28.641
P01C	PMO's SSOC Pipefitter Support	50.00	PMO	HC	9	450	9.207	0	0	9.207	3.186	12.393
P01D	PMO's Alarms Support	100.00	PMO	HC	9	900	19.467	0	0	19.467	6.736	26.203
P01E	PMO's Site Services Pipefitter Support	9.00	PMO	HC	16	144	2.946	0	0	2.946	1.019	3.966
P01G	Supplies	1.00	each	HC	0	0	0	10.810	0	10.810	0	10.810
P02A	UPS / Elevator Maintenance	1.00	ea	VQ	64	64	1.384	8.900	0	10.284	479	10.763
P02B	Maintenance Services	1.00	each	HC	0	0	0	20.620	0	20.620	0	20.620
P02C	Refrigeration	12.00	each	HC	16	192	3.928	0	0	3.928	1.359	5.288
P03	Calibrations	1.00	ea	HC	1,869	1,869	45.045	0	0	45.045	15.586	60.630
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	58.311	58.311	0	58.311
Total for Activity 1DF0203P00:						5.763	126.686	40.330	58.311	225.327	43.833	269.161

Line Item P01 - PMO's Carpenter Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Carpenter Support to Preventative Mtce Orders (Perform routine inspections of hoist/rigging each month and an annual inspection - which serves as a monthly - 16 hoists) (each)
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1DAB02
Activity ID: 1DF0203P00

Rockv Flats Closure Project
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Activity Filter *

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750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.00	Hours
Factors 2 Hours/ea								

Line Item P01A - PMO's Electrician Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Electrician Support to Preventative Mtce Orders (Perform routine, monthly inspections of Emergency lighting, batteries, fork truck, fork truck batteries, Outside lighting).							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	2.00	Hours
	Factors	2	Hours/ea						

Line Item P01B - PMO's Machinist Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Machinist Support to Preventative Mtce Orders - Perform routine, monthly inspections of HVAC equipment, fan belt inspections and vibration analysis.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.00	Hours
	Factors	2	Hours/ea						

Line Item P01C - PMO's SSOC Pipefitter Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Pipefitter Support to Preventative Mtce Orders -Perform routine quarterly and annual inspections of Anti freeze loops (8), and annual fire suppression systems (8). (each)							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	9.00	Hours
	Factors 9 Hours/ea								

Line Item P01D - PMO's Alarms Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Alarms Support to Preventative Mtce Orders - Perform routine monthly, quarterly and annual inspections of Fire panels, LSDW batteries.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	9.00	Hours
	Factors 9 Hours/ea								

Line Item P01E - PMO's Site Services Pipefitter Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Pipefitter Support to Preventative Mtce Orders -Perform annual inspections of Backflow preventors (9).							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
	Factors 16 Hours/ea								

Line Item P01G - Supplies

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Supplies required for Preventative Mtce Orders.							
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES		0000	NONE	K399S	Building 776 Project	Linear	10,810.00	Dollars
	Factors		10810	Dollars						

WBS No: 1DAB02
Activity ID: 1DF0203P00

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Activity Filter *

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Line Item P02A - UPS / Elevator Maintenance

BOE Vendor Name - Certified Elevator Co.
Vendor Quote - 8,700 (\$5,200 elevator, \$3,500 UPS inspection)
Quote Received by - Procurement
Item being quoted - Elevator and UPS Inspections
Other Info - This contract was in place for FY-98
Availability - Other support costs are based on Estimator Judgement

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	64.00	Hours
	Factors	2	Inspections	32	Hours					
	A5C	SUPPLIES		0000	NONE	K399S	Buildina 776 Proiect	Linear	200.00	Dollars
	Factors	200	Dollars in supplies							
	A5H	SUBCONTRACTED SRVS		0000	NONE	K399S	Buildina 776 Proiect	Linear	5.200.00	Dollars
	Factors	2	Semiannual Inspection of elevator	2600	dollars					
	A5H	SUBCONTRACTED SRVS		0000	NONE	K399S	Buildina 776 Proiect	Linear	3.500.00	Dollars
	Factors	1	Annual inspection of UPS	3500	Dollars					

Line Item P02B - Maintenance Services

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Maintenance Services performed in support of B776/777 for inspection of chillers (performed by York International on a service contract), air dryers and compressors (both performed by Cate Colorado Equipment Co.) Supplies are reimbursable costs to be provided by the subcontractor. They are being planned as A5C to differentiate between service costs and forecast supplies.

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES		0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	2,500.00	Dollars
Factors	2500	Dollars in supplies for all								
A5H	SUBCONTRACTED SRVS			0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	8,356.00	Dollars
Factors	4	Air Compressors		2089	Dollars per inspection performed by					
A5H	SUBCONTRACTED SRVS			0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	5,586.00	Dollars
Factors	2	Chillers		2793	Dollars per Chiller performed by York					
A5H	SUBCONTRACTED SRVS			0000	NONE	C210S	Facilities Mgmt & Maintenance	Linear	4,178.00	Dollars
Factors	2	Air Dryers		2089	Dollars per inspection					

Line Item P02C - Refrigeration

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Refrigeration Maintenance Support (each A5H is "Ingersoll-Rand").

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
	Factors	16	Hours/ea						

Line Item P03 - Calibrations

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Calibration Support to Preventative Mtce Orders - Calibration of installed instrumentation and M & TE are funded in this work package to ensure an accurate indication of building conditions and for performance assurance during maintenance activities.

Calibrations include Zone 1 Utility Loops, Magahelics on Gloveboxes, and controllers on the HVAC system and other safety related calibrations.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C100S	Closure Site Services	Linear	225.00	Hours
	Factors	225	Hours						
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFF	C100S	Closure Site Services	Linear	200.00	Hours
	Factors	200	Hours						

WBS No: 1DAB02
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750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	100.00	Hours
Factors	100	Hours						
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	1,215.00	Hours
Factors	1215	Hours						
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	25.00	Hours
Factors	25	Hours						
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	104.00	Hours
Factors	104	Hours						

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	42,142.07	Dollars
Factors	42142.1	Dollars			
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	16,169.07	Dollars
Factors	16169.1	Dollars			

Activity ID: 1DF0203R00 Description: B776/777 Landlord - Routine Maintenance FY-03

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Replace Pressure Release Valves	5.00	Valves	HC	18	91	1,877	500	0	2,377	649	3,027
R01	Minor Maintenance Packages	1,000.00	Maint Pkgs	HC	8	8,000	170,537	62,550	0	233,087	59,006	292,093
SYS	Contingency And Escalation	1.00	ea	EF	0	0	0	0	81,616	81,616	0	81,616
Total for Activity 1DF0203R00:						8,091	172,414	63,050	81,616	317,080	59,655	376,736

Line Item M01 - Replace Pressure Release Valves

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Pressure Release Valve Replacement -Replace existing PRV's on the plant air/instrument air system and steam system

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C210S Facilities Mamt & Maintenance	Linear	0.25	Hours
Factors	0.25	Hours			
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	2.00	Hours
Factors	2	Hours			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	16.00	Hours
Factors	16	Hours			
A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	100.00	Dollars
Factors	100	In supplies per PRV			

Line Item R01 - Minor Maintenance Packages

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Support to Minor Maintenance Packages

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	1.60	Hours
Factors	1.6	Hours			
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	0.50	Hours
Factors	0.5	Hours			
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	1.50	Hours
Factors	1.5	Hours			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.80	Hours
Factors	0.8	Hours			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	0.80	Hours
Factors	0.8	Hours			

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Activity ID: 1DF0203R00

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750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.40	Hours
Factors	0.4	Hours						
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.60	Hours
Factors	1.6	Hours						
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.80	Hours
Factors	0.8	Hours						
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	30.00	Dollars
Factors	30	Dollars						
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	32.55	Dollars
Factors	32.55	Dollars						

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	58,984.84	Dollars
Factors	58984.8	Dollars			
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	22,631.31	Dollars
Factors	22631.3	Dollars			

Activity ID: 1DXXXF2C00 Description: B776/777 Landlord - Corrective Maintenance End

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
C01	Modification Packages	3.95	Mod Pkgs	HC	235	929	20,543	24,186	0	44,730	5,793	50,523
C02	SWP Packages	23.68	SWP Pkgs	HC	102	2,424	52,252	32,550	0	84,802	14,735	99,537
C03	Level of Effort Packages	26.32	LOE Pkgs	HC	33	868	18,038	8,700	0	26,738	5,087	31,825
C04	IWCP Pkgs (Davis Bacon Covered)	3.29	IWCP Pkgs	HC	96	316	7,418	177,632	0	185,049	2,092	187,141
C05	Maintenance Infrastructure	0.66	FY	HC	5,400	3,553	93,186	75,493	0	168,679	26,278	194,957
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	80,376	80,376	0	80,376
Total for Activity 1DXXXF2C00:						8,090	191,437	318,561	80,376	590,375	53,985	644,360

Line Item C01 - Modification Packages

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Repairs to VSS/Non-VSS systems that cannot be accomplished using a standard work package (SWP). This work requires engineering review example: Work requiring breach of Zone 1 containment. (each)

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KD10H 776 Complex Steelworkers	Linear	43.20	Hours
Factors	36 Hours				
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	0.60	Hours
Factors	0.5 Hours				
750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	R100S RMRS Salaried	Linear	12.00	Hours
Factors	10 Hours				
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	48.00	Hours
Factors	40 Hours				
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	43.20	Hours
Factors	36 Hours				
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	21.60	Hours
Factors	18 Hours				
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	21.60	Hours
Factors	18 Hours				
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	21.60	Hours
Factors	18 Hours				
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	10.80	Hours
Factors	9 Hours				

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751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	2.59	Hours
Factors	2.16	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	2.88	Hours
Factors	2.4	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.59	Hours
Factors	2.16	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.67	Hours
Factors	0.56	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.30	Hours
Factors	1.08	Hours	1.2	20% forJHA and walkdowns				
A57	LATA	E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Project	Linear	576.00	Dollars
Factors	480	Dollars	1.2	20% forJHA and walkdowns				
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	3,052.80	Dollars
Factors	2544	Dollars	1.2	20% forJHA and walkdowns				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	2,498.40	Dollars
Factors	2082	Dollars	1.2	20% forJHA and walkdowns				

Line Item C02 - SWP Packages

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Support to SWP Maintenance Packages (each)

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	25.20	Hours
Factors	21	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	0.60	Hours
Factors	0.5	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	10.80	Hours
Factors	9	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
Factors	10	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
Factors	10	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	25.20	Hours
Factors	21	Hours	1.2	20% forJHA and walkdowns				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	10.80	Hours
Factors	9	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	1.51	Hours
Factors	1.26	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	0.65	Hours
Factors	0.54	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	0.6	hour OT per package	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.51	Hours
Factors	1.26	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.65	Hours
Factors	0.54	Hours	1.2	20% forJHA and walkdowns				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.72	Hours
Factors	0.6	Hours	1.2	20% forJHA and walkdowns				

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A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	43.20	Dollars
Factors	36	Dollars		1.2	20% for JHA and walkdowns			
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	719.14	Dollars
Factors	599,283	Dollars		1.2	20% for JHA and walkdowns			
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	612.00	Dollars
Factors	510	dollars		1.2	20% for JHA and walkdowns			

Line Item C03 - Level of Effort Packages

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.
Item Desc - Support to Level of Effort Packages (each)

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	8.64	Hours
Factors	7.2	Hours		1.2 20% for JHA and walkdowns					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	0.60	Hours	
Factors	0.5	Hours		1.2 20% for JHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours	
Factors	3.6	Hours		1.2 20% for JHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours	
Factors	3.6	Hours		1.2 20% for JHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	4.32	Hours	
Factors	3.6	Hours		1.2 20% for JHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	8.64	Hours	
Factors	7.2	Hours		1.2 20% for JHA and walkdowns					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.16	Hours	
Factors	1.8	Hours		1.2 20% for JHA and walkdowns					
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	144.00	Dollars	
Factors	120	Dollars		1.2 20% for JHA and walkdowns					
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	186.60	Dollars	
Factors	155.5	Dollars		1.2 20% for JHA and walkdowns					

Line Item C04 - IWCP Pkgs (Davis Bacon Covered)

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.
Item Desc - IWCP Packages Davis Bacon Covered (each)

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	48.00	Hours
	Factors	40	hours per package	1.2	20% for JHA and walkdowns					
	750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	48.00	Hours
	Factors	40	Hours	1.2	20% for JHA and walkdowns					
	A5C	SUPPLIES		0000	NONE	K399S	Building 776 Project	Linear	6,000.00	Dollars
	Factors	5000	Dollars in supplies for each DB IWCP			1.2	20% for JHA and walkdowns			
	A5H	SUBCONTRACTED SRVS		0000	NONE	K399S	Building 776 Project	Linear	48,000.00	Dollars
	Factors	40000	dollars			1.2	20% for JHA and walkdowns			

Line Item C05 - Maintenance Infrastructure

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.
Item Desc - Maintenance Infrastructure contains management and oversight scope that can not be reasonably or effectively allocated to specific maintenance packages.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1,800.00	Hours
	Factors	1	Senior specialist - Vanzant	1800	Hours				

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750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	3,600.00	Hours
Factors	2	Pflipsen, Knapp	1800	Hours				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	114,750.00	Dollars
Factors	114750	Dollars						

Line Item SYS - Contingency And Escalation

BOE

Resources

CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	26,224.2	Dollars
Factors	26224.2	Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	54,151.63	Dollars
Factors	54151.6	Dollars						

Activity ID: 1DXXXFP00 Description: B776/777 Landlord - Preventative Maint end

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
P01	PMO's Carpenter Support	126.32	PMO	HC	2	253	5,169	0	0	5,169	1,458	6,626
P01A	PMO's Electrician Support	236.84	PMO	HC	2	474	10,246	0	0	10,246	2,889	13,135
P01B	PMO's Machinist Support	342.11	PMO	HC	2	684	13,999	0	0	13,999	3,948	17,947
P01C	PMO's SSOC Pipefitter Support	32.89	PMO	HC	9	296	6,057	0	0	6,057	1,708	7,765
P01D	PMO's Alarms Support	65.79	PMO	HC	9	592	12,807	0	0	12,807	3,612	16,419
P01E	PMO's Site Services Pipefitter Support	5.92	PMO	HC	16	95	1,938	0	0	1,938	547	2,485
P01G	Supplies	0.66	each	HC	0	0	0	7,112	0	7,112	0	7,112
P02A	UPS / Elevator Maintenance	0.66	ea	VQ	64	42	911	5,855	0	6,766	257	7,023
P02B	Maintenance Services	0.66	each	HC	0	0	0	13,566	0	13,566	0	13,566
P02C	Refrigeration	7.89	each	HC	16	126	2,584	0	0	2,584	729	3,313
P03	Calibrations	0.66	ea	HC	1,869	1,230	29,635	0	0	29,635	8,357	37,992
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	19,009	19,009	0	19,009
Total for Activity 1DXXXFP00:						3,791	83,346	26,533	19,009	128,888	23,504	152,392

Line Item P01 - PMO's Carpenter Support

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Carpenter Support to Preventative Mtce Orders (Perform routine inspections of hoist/rigging each month and an annual inspection - which serves as a monthly - 16 hoists) (each)

Resources

750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.00	Hours
Factors	2	Hours/ea						

Line Item P01A - PMO's Electrician Support

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Electrician Support to Preventative Mtce Orders (Perform routine, monthly inspections of Emergency lighting, batteries, fork truck, fork truck batteries, Outside lighting).

Resources

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C211S	Electrical Maintenance	Linear	2.00	Hours
Factors	2	Hours/ea						

Line Item P01B - PMO's Machinist Support

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.

Item Desc - Machinist Support to Preventative Mtce Orders - Perform routine, monthly inspections of HVAC equipment, fan belt inspections and vibration analysis.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
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WBS No: 1DAB02
Activity ID: 1DXXXFP00

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
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1DAB
*

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750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.00	Hours
Factors	2	Hours/ea						

Line Item P01C - PMO's SSOC Pipefitter Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Pipefitter Support to Preventative Mtce Orders -Perform routine quarterly and annual inspections of Anti freeze loops (8), and annual fire suppression systems (8). (each)							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	9.00	Hours
	Factors	9	Hours/ea						

Line Item P01D - PMO's Alarms Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Alarms Support to Preventative Mtce Orders - Perform routine monthly, quarterly and annual inspections of Fire panels, LSDW batteries.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	9.00	Hours
	Factors	9	Hours/ea						

Line Item P01E - PMO's Site Services Pipefitter Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Pipefitter Support to Preventative Mtce Orders -Perform annual inspections of Backflow preventors (9).							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00	Hours
	Factors	16	Hours/ea						

Line Item P01G - Supplies

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. Item Desc - Supplies required for Preventative Mtce Orders.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	10.810.00	Dollars
	Factors 10810 Dollars								

Line Item P02A - UPS / Elevator Maintenance

BOE	Vendor Name - Certified Elevator Co. Vendor Quote - 8,700 (\$5,200 elevator, \$3,500 UPS inspection) Quote Received by - Procurement Item being quoted - Elevator and UPS Inspections Other Info - This contract was in place for FY-98 Availability - Other support costs are based on Estimator Judgement							
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units	
	750	STRAIGHT TIME BASE		C020	ELECTRICIANS		C211S	Electrical Maintenance	Linear	64.00	Hours
	Factors	2	Inspections		32	Hours					
	A5C	SUPPLIES		0000	NONE		K399S	Building 776 Project	Linear	200.00	Dollars
	Factors	200	Dollars in supplies								
	A5H	SUBCONTRACTED SRVS		0000	NONE		K399S	Building 776 Project	Linear	5.200.00	Dollars
	Factors	2	Semiannual inspection of elevator		2600	dollars					
	A5H	SUBCONTRACTED SRVS		0000	NONE		K399S	Building 776 Project	Linear	3.500.00	Dollars
	Factors	1	Annual inspection of UPS		3500	Dollars					

Line Item P02B - Maintenance Services

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.							
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Item Desc - Maintenance Services performed in support of B776/777 for inspection of chillers (performed by York International on a service contract), air dryers and compressors (both performed by Cate Colorado Equipment Co.) Supplies are reimbursable costs to be provided by the subcontractor. They are being planned as A5C to differentiate between service costs and forecast supplies.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	2.500.00Dollars
Factors	2500	Dollars in supplies for all					
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	8.356.00Dollars
Factors	4	Air Compressors 2089 Dollars per inspection performed by					
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	5.586.00Dollars
Factors	2	Chillers 2793 Dollars per Chiller performed by York					
A5H	SUBCONTRACTED SRVS	0000	NONE	C210S	Facilities Mamt & Maintenance	Linear	4.178.00Dollars
Factors	2	Air Drvers 2089 Dollars per inspection					

Line Item P02C - Refrigeration

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.									
	Item Desc - Refrigeration Maintenance Support (each A5H is "Ingersoll-Rand".									

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00Hours
Factors	16	Hours/ea					

Line Item P02C - Calibrations

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.									
	Item Desc - Calibration Support to Preventative Mtce Orders - Calibration of installed instrumentation and M & TE are funded in this work package to ensure an accurate indication of building conditions and for performance assurance during maintenance activities.									
	Calibrations include Zone 1 Utility Loops, Magahelics on Gloveboxes, and controllers on the HVAC system and other safety related calibrations.									

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C100S	Closure Site Services	Linear	225.00Hours
Factors	225	Hours					
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C100S	Closure Site Services	Linear	200.00Hours
Factors	200	Hours					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	100.00Hours
Factors	100	Hours					
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	1.215.00Hours
Factors	1215	Hours					
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	25.00Hours
Factors	25	Hours					
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KD10H	776 Complex Steelworkers	Linear	104.00Hours
Factors	104	Hours					

Line Item SYS - Contingency And Escalation

BOE							
Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	6.202.06Dollars
Factors	6202.06	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	12.806.92Dollars
Factors	12806.9	Dollars					

Activity ID: 1DXXXFR00 Description: B776/777 Landlord - Routine Maintenance end

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
M01	Replace Pressure Release Valves	3.29	Valves	HC	18	60	1.235	329	0	1.564	348	1.912

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R01	Minor Maintenance Packages	657.89	Maint Pkgs	HC	8	5.263	112.195	41.151	0	153.347	31.639	184.986
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	26.636	26.636	0	26.636
Total for Activity 1DXXXFR00:						5.323	113.430	41.480	26.636	181.546	31.987	213.534

Line Item M01 - Replace Pressure Release Valves

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.
Item Desc - Pressure Release Valve Replacement -Replace existing PRV's on the plant air/instrument air system and steam system

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C210S	Facilities Mamt & Maintenance	Linear	0.25 Hours
Factors	0.25	Hours					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2.00 Hours
Factors	2	Hours					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	16.00 Hours
Factors	16	Hours					
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	100.00 Dollars
Factors	100	In supplies per PRV					

Line Item R01 - Minor Maintenance Packages

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients.
Item Desc - Support to Minor Maintenance Packages

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	1.60 Hours
Factors	1.6	Hours					
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	0.50 Hours
Factors	0.5	Hours					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	1.50 Hours
Factors	1.5	Hours					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.80 Hours
Factors	0.8	Hours					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.80 Hours
Factors	0.8	Hours					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.40 Hours
Factors	0.4	Hours					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.60 Hours
Factors	1.6	Hours					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	0.80 Hours
Factors	0.8	Hours					
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	K399S	Building 776 Project	Linear	30.00 Dollars
Factors	30	Dollars					
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	32.55 Dollars
Factors	32.55	Dollars					

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	8.690.42 Dollars
Factors	8690.42	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	17.945.24 Dollars
Factors	17945.2	Dollars					

WBS No: 1DAB03	Title: B776 Operations Technical Support
Activity ID: 1DB0300000	Description: FY-00 B776 Operations Technical Spt 4th Qtr

Cost Risk 2 Schedule Risk 3

WBS No: 1DAB03
Activity ID: 1DB0300000

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Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
T02	Radiological Engineering	1.00	ea	HC	680	680	23,263	57,800	0	81,063	11,352	92,415
T03	Stepoff Pad	1.00	ea	H	816	816	18,627	0	0	18,627	9,090	27,716
T04	Contamination Control	1.00	ea	H	197	197	4,492	0	0	4,492	2,192	6,685
T05	Radiological Work Permit	1.00	ea	H	748	748	16,368	0	0	16,368	7,988	24,356
T06	ALARA Committee	1.00	ea	HC	22	22	445	0	0	445	217	662
T07	Analytical Lab - DAC	3,200.00	each	H	0	0	0	70,400	0	70,400	0	70,400
T08	Nuclear Safety Support	1.00	each	HC	0	0	0	231,200	0	231,200	0	231,200
T10	Electrical Engineering	1.00	ea	H	0	0	0	95,263	0	95,263	0	95,263
T11	Mechanical Engineering	1.00	ea	HC	680	680	22,284	47,600	0	69,884	10,874	80,758
T13	Fire Protection Engineering	1.00	ea	HC	0	0	0	115,600	0	115,600	0	115,600
T14	Emergency Preparedness	1.00	ea	HC	52	52	1,069	38,000	0	39,069	522	39,591
T15	Procedures	1.00	ea	HC	0	0	0	71,400	0	71,400	0	71,400
T16	Criticality Engineering	1.00	ea	HC	0	0	0	57,800	0	57,800	0	57,800
T17	Plan of the Week/DOD	1.00	ea	HC	338	338	8,868	0	0	8,868	4,328	13,195
T19	Project Safety Officer	1.00	each	HC	0	0	0	57,800	0	57,800	0	57,800
T20	Plant Review Committee	1.00	each	HC	38	38	985	6,386	0	7,371	481	7,852
T21	Health Physics And Instrumentation	1.00	ea	H	0	0	0	89,915	0	89,915	0	89,915
T22	Radiological Management	1.00	each	HC	1,857	1,857	52,606	25,000	0	77,606	25,672	103,277
T23	Criticality Safety Officer	1.00	ea	HC	650	650	28,126	0	0	28,126	13,725	41,851
T24	Occurrence Reporting	1.00	each	HC	325	325	8,527	0	0	8,527	4,161	12,688
T27	Chemical Control Officer	1.00	ea	HC	680	680	17,836	0	0	17,836	8,704	26,541
Total for Activity 1DB0300000:						7,082	203,495	964,164	0	1,167,659	99,306	1,266,965

Line Item T02 - Radiological Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Provides support services for ALARA, IWCPs, Building Assessments, Operation Orders, Technical Bases Documents, Radiological Deficiency Reports, Radiological Work Permits, Device/Source Audit Deliverables, ALARA job reviews and property/waste release evaluation database maintenance and Radiation Protection Program maintenance.											
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	R100S RMRS Salaried	Linear	680.00	Hours
Factors	1 Radiological Safety Engineer	680 hours per year				
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	K399S Building 776 Project	Linear	57,800.00	Dollars
Factors	1 Radiological Safety Engineer Grube	680 hours per year	85 dollars per hour			

Line Item T03 - Stepoff Pad

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - This activity encompasses the radiological monitoring of personnel and equipment exiting the Radiological Controlled Areas. The proper release documentation of material and equipment leaving the radiological controlled areas is the responsibility of the set-off pad RCT. The step-off pad RCT responds to any contamination monitor alarm from personnel self-monitoring or personnel requesting help for self-monitoring. Equipment and personnel monitoring are required by the Site Radiological Control Manual and DOE Order 5400.5 to ensure the safety of the workers, the public and the environment. The step-off pad RCT also performance tests the instruments used at the step-off pad on a daily basis.											
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	680.00	Hours
Factors	1 RCT	680 hrs per day				
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	136.00	Hours
Factors	680 Total ST hours	0.2 20% Over-Time	1 RCT			

Line Item T04 - Contamination Control

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary											
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Item Desc - Identification of contamination sources to prevent the spreading of contamination in controlled areas and individual exposures. Detection of contamination in cold areas; provision of technical information regarding the amount of contamination and the degree of risk in corrective actions. Response to SAAM alarms on off normal conditions, and response to loss of contamination control issues, i.e., Radiological contamination of gloves, booties, and personnel. Performance of pre-job surveys on misc. minor tasks to ensure the Radiological Work Permits are adequate to control the work performed.

Also, decontamination/contamination area rollback will be performed to increase work efficiency, reduce laundry costs, and minimize the generation of of radioactive waste. The process will include walls and floors, as well as all materials and equipment in the area to be downgraded, to be surveyed and/or decontaminated. A representative sample of rooms slated for decontamination includes: Rooms: 134E; 430; 463; 452; 131; 134; and 154A.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	164.00Hours
Factors		2	Hours/day	82	days remaining		
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	32.80Hours
Factors		0.2	20% Overtime	164	Straight Time Hours		

Line Item T05 - Radiological Work Permit

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc	Writing and distribution of Radiological Work Permits which define the safe radiological working parameters. This task includes maintenance of a filing system to control the number of RWPs released and tracks returns to the RWP office through a daily log. Archiving of expired Radiological Work Permits and their supporting documentation is also performed, as well as issuing and tracking the return of Electronic Pocket Dosimeters (EPD)and recording and tracking individual doses from EPDs. All radiological surveys are filed and archived.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	680.00Hours
Factors		1	RCT	680	Hours		
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	68.00Hours
Factors		0.1	10% Overtime	680	Straight Time Hours		

Line Item T06 - ALARA Committee

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc	The ALARA Committee addresses radiological safety concerns and issues that have been identified by the building, programs, or an activity that was conducted. The Chairperson shall be the Operations/Facility Manager, or designee, and the committee shall consist of representatives from departments that support the area. The Committee performs evaluations to determine whether activities are being conducted in accordance with the ALARA Program and implementing procedures. Formulates and coordinates the implementation of the Project Area ALARA goals. Meets monthly on any actions taken to resolve radiological issues, noteworthy ALARA accomplishments, ALARA concerns, etc.. Generates a status report of items discussed and/or acted upon. This task includes walk-downs, meetings, reporting, etc..

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	4.33Hours
Factors		1	hour per monthlv meeting	1	RCT	12	months
						0.3612	82/227 Days remaining
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	8.67Hours
Factors		1	hour per monthlv meeting	2	D&D Skilled	12	Months
						0.3612	82/227 Days remaining
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	8.67Hours
Factors		1	hours per monthly meeting	2	HRT	12	months
						0.3612	82/227 Days remaining

Line Item T07 - Analytical Lab - DAC

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc	Analytical Lab Support includes Offsite Commercial Support, Hot/Mixed Lab Support, Sample Team Support, and Mobile Lab Support . These activites are described below: DAC Analytical Support - Perform Gross Alpha analysis for the following items: 1) Gross Alpha (OS01-02)

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- 2) Radiological Screening (OS03-04)
- 3) Gross Alpha/Beta (OS05-17)
- 4) Gross Alpha/Beta - Air Filters (OS18-20)
- 5) Air Filter Loading, Unloading, and Compositing (OS-21)

The type and quantity of the analysis performed is dependent on project customer needs as well as the laboratory capability and capacity.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analytical Laboratory Services	Linear	22.00	Dollars

Factors 22 dollars per DAC Sample

Line Item T08 - Nuclear Safety Support

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p>									
	<p>Item Desc - This function is performed by Nuclear Safety Engineering which provides nuclear technical support, facility safety analysis, Unreviewed Safety Question Determination (USQD) of activities and documents submitted for review, participation in the Operational Review Committee (ORC) process to clarify and advise members on issues concerning USQDs, Safety Evaluation Screens (SESS), and Operational Safety Requirements/Technical Safety Requirements (OSR/TSR) page changes and guidance. Historically, three engineers have been required to perform this scope.</p>									

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	231,200.00	Dollars

Factors 1 Nuclear Safety Engineer Board. 85 dollars per hour 680 hours 4 personnel

Line Item T10 - Electrical Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Desc - The Electrical Engineering group serves as Subject Matter Expert on all electrical power related equipment and systems; supports IWCP development; performs engineering operability evaluations on an as-needed basis; supports authorization basis activities; and serves as liaison/Point of Contact with RMRS Central Engineering on building engineering matters. Additionally, this position will provide engineering support for procedure development, system walkdown and one-line drawing development, labeling of key components, and development of system descriptions.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	29.473.92	Dollars

Factors 1 Electrical Engineer All of these are 12 packages per year 80 hours per design modification 85 dollars per hour
0.3612 82/227 Days remaining

A52	TENERA		E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	12.894.84	Dollars
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Factors 1 Electrical engineers 12 EOE's per year 35 hours per Engineering Operability 85 dollars per hour
0.3612 82/227 Days remaining

A52	TENERA		E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	19.158.05	Dollars
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Factors 2 LO/TOS per week 6 hours support for Lockout/Tagout 52 Weeks per year 85 dollars per hour
0.3612 82/227 Days remaining

A52	TENERA		E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	18.421.20	Dollars
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Factors 1 Electrical Engineer 15 ESPs per year 40 hours per Engineering Support 85 dollars per hour
0.3612 82/227 Days remaining

A57	LATA		E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	10.113.60	Dollars
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Factors 70 dollars per hour 10 hours support to Standard Work 40 SWPs requiring EE support
0.3612 82/227 Days remaining

A57	LATA		E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	5.201.28	Dollars
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Factors 1 electrical engineer 10 calculation in support of various 24 hours per electrical calculation 60 dollars per hour
0.3612 82/227 Days remaining

Line Item T11 - Mechanical Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Desc - The Mechanical Engineering group serves as subject matter expert on all mechanical equipment related systems. Additionally, this discipline provides engineering support for procedure development, system walkdowns and one-line drawing development, labeling of key components, and development of

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system descriptions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	R100S	RMRS Salaried	Linear	680.00	Hours
Factors	1	Mechanical Engineer Bentzinger	680	Hours per year				
A57	LATA	E070	MECHANICAL ENGINEERS	K399S	Building 776 Project	Linear	47,600.00	Dollars
Factors	70	dollars per hour Barr	1	Mechanical Engineers	680	hours each per year		

Line Item T13 - Fire Protection Engineering

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Fire Protection Engineering provides technical support and fire hazards analysis for the building.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K252S	Engineering	Linear	115,600.00	Dollars
Factors	85	dollars per hour Lanning	680	hours	2	FPE		

Line Item T14 - Emergency Preparedness

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This function includes administering the implementation of the RFETS Emergency Preparedness Program for the protection of personnel, the public, and the environment during emergency response; development and implementation of the Building Emergency Program, provision of technical assistance to building management for development and conduct of building drills (includes drill controller and evaluator), procedure review and approval and training for the Building Emergency Preparedness Personnel on new procedures and development processes.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	17.34	Hours
Factors	2	RCT	2	hours per drill	12	Drills per year	0.3612	82/227 Days remaining
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	34.68	Hours
Factors	4	Process Specialist	2	hours per drill	12	Drills per year	0.3612	82/227 Days remaining
A52	TENERA	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	38,000.00	Dollars
Factors	95	\$s/Hour	400	Hours	1	Bepa Consultant Wells		

Line Item T15 - Procedures

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Procedure Administration function includes development, updating, modifications and issuance of procedures to operate the facility.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	71,400.00	Dollars
Factors	1.5	Procedure Writers 1/2 Chartrand, full	70	dollars per hour	680	hours each per year		

Line Item T16 - Criticality Engineering

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Criticality Engineering function provides the building with criticality safety analysis that is in conformance to applicable standards, rules, and orders, and provides guidance in the form of limits and procedures which ensure the subcriticality of the building's fissile material during handling, processing, and storage operations. Two Criticality Engineers are required plus 0.5 FTE for the Lead Criticality Engineer.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	57,800.00	Dollars
Factors	85	dollars per hour Malinoskv	680	hours each per year	1	Criticality Safety Engineers Medrick		

Line Item T17 - Plan of the Week/DOD

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

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Item Desc - The Plan of the Week (POW) is a meeting held each week to plan all work activities for the coming week, to discuss the current Facility condition and radiological concerns, to update the activity schedule, set priorities, and allocate resources. The Plan of the Week coordinator is funded in this activity.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	338.08	Hours
Factors	18	Hours per week	Morgan	52	Weeks per year	0.3612	82/227 Days remaining	

Line Item T19 - Project Safety Officer

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Project Safety Officer (A.) Performs required Health and Safety activities, identifies hazards and potential accident producing situations within the work place, and reviews work packages, engineering work orders and equipment installation or maintenance activities for safety systems and interlock functions. Promotes and maintains awareness through employee participation, enforcement of safety rules, accident tracking and trending, and corrective actions.

(B.) Maintains ASME registration and training required to perform required Health and Safety activities noted above.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	K399S	Building 776 Project	Linear	57.800.00	Dollars
Factors	1	Industrial Hygienist - Farler	680	Hours per year	85	dollars per hour		

Line Item T20 - Plant Review Committee

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Plant Review Committee, in accordance with 3-T34-SSOC-PRC, provides independent safety reviews for B776/777-related documents (e.g., procedures, IWCPs, Ops Orders, Discovery Issues, etc.) to minimize and mitigate Nuclear Safety impacts and to ensure safe operations within the facility.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	37.56	Hours
Factors	2	hours per week	52	weeks per year	0.3612	82/227 Days remaining		
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	3.193.01	Dollars
Factors	1	Nuclear Safety Professional Medrick	2	hours per week	52	Weeks per year	0.3612	82/227 Days remaining
	85	dollars per hour						
A5H	SUBCONTRACTED SRVS	E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Project	Linear	3.193.01	Dollars
Factors	1	QA Professional	2	Hours per week	52	weeks per year	85	dollars per hour
	0.3612	82/227 Days remaining						

Line Item T21 - Health Physics And Instrumentation

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc -

A. Leased Labor cost of calibrations by Alpha Group of instruments used by building radiation control personnel and other building personnel: Alphamets - 114 hrs, A-100 - 176 hrs, Mircorem - 90 hrs, DRDs - 46 hrs, SAC-4 - 160 hrs, Electras - 441 hrs, Hi Vol Samplers - 34 Hrs, Lo Vol Samplers - 40 hrs, Ludlum 12-1A - 224 hrs, Ludlum 12-4 - 247 hrs, Ludlum 31 - 7 hrs, Ludlum 2 - 5 hrs, PCM-2 - 1100 hrs, RO-20 - 605 hrs, SAIC AP-2 - 16 hrs, for a total of 3305 hrs

B. Parts, supplies and overhead costs of calibration of instruments used by building radiation control personnel and other building personnel: Balances, O2 Analyzers, magnahelics, photohelics, pressure differentials, torque wrenches, PCM-2s, Ludlums, etc.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	6.501.60	Dollars
Factors	18000	Dollars for supplies			0.3612	82/227 Days remaining		
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	83.413.36	Dollars
Factors	66	dollars per hour	Support from Alpha	3499	Hours	0.3612	82/227 Days remaining	

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Line Item T22 - Radiological Management

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Rad Ops Management provides technical direction, interpretation and guidance in all aspects of radiological control to ensure effective radiation safety practices and compliance with orders and rules. Also included in this task are routine maintenance activities necessary to support everyday radiological record logkeeping and survey documentation and procurement of routine supplies necessary to support everyday radiological record logkeeping, survey documentation, replacement/additional instrumentation, and personnel safety.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	1,300.32	Hours
Factors	2	Radiological Foreman Sutton, Fields		1800	Hours each	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	361.20	Hours
Factors	1	Off-shift Supervisor		1000	hours per year	0.3612	82/227 Days remaining	
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project	Linear	195.05	Hours
Factors	0.15	15% Overtime		3600	hours Straight time	0.3612	82/227 Days remaining	
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	25,000.00	Dollars
Factors	25000	Misc Supplies						

Line Item T23 - Criticality Safety Officer

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Criticality Safety Officer performs the duties set forth in the Nuclear Criticality Safety Manual including serving as liaison for any criticality safety matters between organizations that have custody of fissionable material and all other organizations, coordination of requests for Critical Safety Engineering, and preparation of criticality safety operations limit postings. Also included are the annual criticality safety assessments for the facility.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	R100S	RMRS Salaried	Linear	650.00	Hours
Factors	650	Hours/ea Pantan		1	Crit Safety Officer			

Line Item T24 - Occurrence Reporting

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of support required to maintain occurrence reporting requirements, including preparing and uploading of notifications, conducting investigations and critiques as necessary, processing 10-day update reports, preparing root cause analysis reports and process final reports for DOE approval. In addition, required reading is included in this work scope.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	325.08	Hours
Factors	900	Hours per year		1	Occurrence Reporting Professional	0.3612	82/227 Days remaining	

Line Item T27 - Chemical Control Officer

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Chemical Control Officer serves as the single point of contact for chemical management within the Building 776/777 complex, maintains the Chemical Management Plan, maintains a list of chemical storage sites, maintains the Chemical Management Data Base, tracks the quantities of chemicals in the Building 776/777 complex and conducts bi-annual wall-to-wall inventories and random inventories as needed, reviews and approves requisitions for chemicals, maintains Material Safety Data Sheets for chemicals stored in the Building 776/777 complex, works with managers, supervisors and other staff to develop and implement appropriate chemical procedures and practices, and performs the monthly inspections of flammable cabinets.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	680.00	Hours
Factors	1	Chemical Control Officer - McDonald		680	Hours			

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Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
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			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost	Starts In FY	*
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	178.839	178.839	0	178.839
T02	Radiological Engineering	1.00	ea	HC	1.800	1.800	61.578	306.000	0	367.578	29.373 396.951
T03	Stepoff Pad	1.00	ea	H	2.574	2.574	56.326	0	0	56.326	26.868 83.194
T04	Contamination Control	1.00	ea	H	515	515	11.265	0	0	11.265	5.374 16.639
T05	Radiological Work Permit	1.00	ea	H	2.317	2.317	50.694	0	0	50.694	24.181 74.874
T06	ALARA Committee	1.00	ea	HC	60	60	1.231	0	0	1.231	587 1.818
T07	Analytical Lab - DAC	9.600.00	each	H	0	0	0	211.200	0	211.200	0 211.200
T08	Nuclear Safety Support	1.00	each	HC	0	0	0	612.000	0	612.000	0 612.000
T10	Electrical Engineering	1.00	ea	H	0	0	0	263.740	0	263.740	0 263.740
T11	Mechanical Engineering	1.00	ea	HC	1.800	1.800	58.986	126.000	0	184.986	28.136 213.122
T13	Fire Protection Engineering	1.00	ea	HC	0	0	0	153.000	0	153.000	0 153.000
T14	Emergency Preparedness	1.00	ea	HC	144	144	2.960	85.500	0	88.460	1.412 89.872
T15	Procedures	1.00	ea	HC	0	0	0	189.000	0	189.000	0 189.000
T16	Criticality Engineering	1.00	ea	HC	0	0	0	153.000	0	153.000	0 153.000
T17	Plan of the Week/POD	1.00	ea	HC	936	936	24.551	0	0	24.551	11.711 36.262
T19	Project Safety Officer	1.00	each	HC	0	0	0	153.000	0	153.000	0 153.000
T20	Plant Review Committee	1.00	each	HC	104	104	4.500	17.680	0	22.180	2.147 24.327
T21	Health Physics And Instrumentation	1.00	ea	H	0	0	0	248.934	0	248.934	0 248.934
T22	Radiological Management	1.00	each	HC	5.140	5.140	145.641	25.000	0	170.641	69.471 240.112
T23	Criticality Safety Officer	1.00	ea	HC	1.800	1.800	77.886	0	0	77.886	37.152 115.038
T24	Occurrence Reporting	1.00	each	HC	900	900	23.607	0	0	23.607	11.261 34.868
T27	Chemical Control Officer	1.00	ea	HC	1.800	1.800	47.214	0	0	47.214	22.521 69.735
Total for Activity 1DF0301T00:					19.889	566.440	2.544.054	178.839	3.289.333	270.192	3.559.525

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	107.750.60	Dollars
Factors 107751 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	71.088.26	Dollars
Factors 71088.3 Dollars						

Line Item T02 - Radiological Engineering

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Provides support services for ALARA, IWCPs, Building Assessments, Operation Orders, Technical Bases Documents, Radiological Deficiency Reports, Radiological Work Permits, Device/Source Audit Deliverables, ALARA job reviews and property/waste release evaluation database maintenance and Radiation Protection Program maintenance.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E130 OTHER ENGINEERS	R100S RMRS Salaried	Linear	1.800.00	Hours
Factors 1 Radiological Safety Engineer 1800 hours per year						
A5H	SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	K399S Building 776 Project	Linear	153.000.00	Dollars
Factors 1 Radiological Safety Engineer TBD 1800 hours per year 85 dollars per hour						
A5H	SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	K399S Building 776 Project	Linear	153.000.00	Dollars
Factors 1 Radiological Safety Engineer Grube 1800 hours per year 85 dollars per hour						

Line Item T03 - Stepoff Pad

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity encompasses the radiological monitoring of personnel and equipment exiting the Radiological Controlled Areas. The proper release documentation of material and equipment leaving the radiological controlled areas is the responsibility of the set-off pad RCT. The step-off pad RCT responds to any contamination monitor alarm from personnel self-monitoring or personnel requesting help for self-monitoring. Equipment and personnel

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monitoring are required by the Site Radiological Control Manual and DOE Order 5400.5 to ensure the safety of the workers, the public and the environment. The step-off pad RCT also performance tests the instruments used at the step-off pad on a daily basis.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2,340.00Hours
Factors		1	RCT	9	hrs per day	52	weeks
						5	days per week
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	234.00Hours
Factors		2340	Total ST hours	0.1	10% Over-Time	1	RCT

Line Item T04 - Contamination Control

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Identification of contamination sources to prevent the spreading of contamination in controlled areas and individual exposures. Detection of contamination in cold areas; provision of technical information regarding the amount of contamination and the degree of risk in corrective actions. Response to SAAM alarms on off normal conditions, and response to loss of contamination control issues, i.e., Radiological contamination of gloves, booties, and personnel. Performance of pre-job surveys on misc. minor tasks to ensure the Radiological Work Permits are adequate to control the work performed.									
	Also, decontamination/contamination area rollback will be performed to increase work efficiency, reduce laundry costs, and minimize the generation of of radioactive waste. The process will include walls and floors, as well as all materials and equipment in the area to be downgraded, to be surveyed and/or decontaminated. A representative sample of rooms slated for decontamination includes: Rooms: 134E; 430; 463; 452; 131; 134; and 154A.									

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	468.00Hours
Factors		2	Hours/day	234	working AWS days		
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	46.80Hours
Factors		0.1	10% Overtime	468	Straight Time Hours		

Line Item T05 - Radiological Work Permit

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Writing and distribution of Radiological Work Permits which define the safe radiological working parameters. This task includes maintenance of a filing system to control the number of RWPs released and tracks returns to the RWP office through a daily log. Archiving of expired Radiological Work Permits and their supporting documentation is also performed, as well as issuing and tracking the return of Electronic Pocket Dosimeters (EPD)and recording and tracking individual doses from EPDs. All radiological surveys are filed and archived.</p>
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2,106.00Hours
Factors		1	RCT	9	Hours per day	234	Working AWS days
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	210.60Hours
Factors		0.1	10% Overtime	2106	Straight Time Hours		

Line Item T06 - ALARA Committee

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Desc - Addresses radiological safety concerns and issues that have been identified by the building, programs, or an activity that was conducted. The Chairperson shall be the Operations/Facility Manager, or designee, and the committee shall consist of representatives from departments that support the area. Performs evaluations to determine whether activities are being conducted in accordance with the ALARA Program and implementing procedures. Formulates and coordinates the implementation of the Project Area ALARA goals. Meets monthly on any actions taken to resolve radiological issues, noteworthy ALARA accomplishments, ALARA concerns, etc.. Generates a status report of items discussed and/or acted upon. Includes walk-downs, meetings, reporting, etc..

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	12.00Hours
Factors		1	hour per monthlv meeting	1	RCT	12	months
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00Hours
Factors		1	hour per monthlv meeting	2	Pipefitters	12	Months
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00Hours
Factors		1	hours per monthly meeting	2	Process Specialists	12	months

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Line Item T07 - Analytical Lab - DAC

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Lab Support includes Offsite Commercial Support, Hot/Mixed Lab Support, Sample Team Support, and Mobile Lab Support . These activites are described below:									
	DAC Analytical Support - Gross Alpha analysis for the following items:									
	1) Gross Alpha (OS01-02) 2) Radiological Screening (OS03-04) 3) Gross Alpha/Beta (OS05-17) 4) Gross Alpha/Beta - Air Filters (OS18-20) 5) Air Filter Loeading, Unloading, and Compositing (OS-21)									
	The type and quantity of the analysis performed is dependent on project customer needs as well as the laboratory capability and capacity.									

Resources		Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analytical Laboratory Services	Linear	22.00	Dollars		
Factors	22	dollars per DAC Sample								

Line Item T08 - Nuclear Safety Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - This function is performed by Nuclear Safety Engineering which provides nuclear technical support, facility safety analysis, Unreviewed Safety Question Determination (USQD) of activities and documents submitted for review, participation in the Operational Review Committee (ORC) process to clarify and advise members on issues concerning USQDs, Safety Evaluation Screens (SEs), and Operational Safety Requirements/Technical Safety Requirements (OSR/TSR) page changes and guidance. Historically, three engineers have been required to perform this scope.									

Resources		Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	612,000.00	Dollars		
Factors	1	Nuclear Safety Engineer Board,		85	dollars per hour	1800	hours	4	personnel	

Line Item T10 - Electrical Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - The Electrical Engineering group serves as Subject Matter Expert on all electrical power related equipment and systems; supports IWCP development; performs engineering operability evaluations on an as-needed basis; supports authorization basis activities; and serves as liaison/Point of Contact with RMRS Central Engineering on building engineering matters. Additionally, this position will provide engineering support for procedure development, system walkdown and one-line drawing development, labeling of key components, and development of system descriptions.									

Resources		Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	81,600.00	Dollars		
Factors	1	Electrical Engineer All of these are		12	packages per year	80	hours per design modification	85	dollars per hour	
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	35,700.00	Dollars		
Factors	1	Electrical engineers		12	EOEs per year	35	hours per Engineering Operability	85	dollars per hour	
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	53,040.00	Dollars		
Factors	2	LO/TOs per week		6	hours support for Lockout/Tagout	52	Weeks per year	85	dollars per hour	
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	51,000.00	Dollars		
Factors	1	Electrical Engineer		15	ESPs per year	40	hours per Engineering Support	85	dollars per hour	
A57	LATA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	28,000.00	Dollars		
Factors	70	dollars per hour		10	hours support to Standard Work	40	SWPs requiring EE support			
A57	LATA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	14,400.00	Dollars		
Factors	1	electrical engineer		10	calculation in support of various	24	hours per electrical calculation	60	dollars per hour	

Line Item T11 - Mechanical Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									

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Item Desc - The Mechanical Engineering group serves as subject matter expert on all mechanical equipment related systems. Additionally, this discipline provides engineering support for procedure development, system walkdowns and one-line drawing development, labeling of key components, and development of system descriptions.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750		STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	R100S	RMRS Salaried	Linear	1.800.00	Hours
Factors	1	Mechanical Engineer Bentzinger		1800	Hours per year			
A57		LATA	E070 MECHANICAL ENGINEERS	K399S	Building 776 Project	Linear	126.000.00	Dollars
Factors	70	dollars per hour Barr		1	Mechanical Engineers		1800	hours each per year

Line Item T13 - Fire Protection Engineering

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - Fire Protection Engineering provides technical support and fire hazards analysis for the building.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
A5H		SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	K252S	Engineering	Linear	153.000.00	Dollars
Factors	85	dollars per hour Lanning		1800	hours			

Line Item T14 - Emergency Preparedness

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - This function includes administering the implementation of the RFETS Emergency Preparedness Program for the protection of personnel, the public, and the environment during emergency response; development and implementation of the Building Emergency Program, provision of technical assistance to building management for development and conduct of building drills (includes drill controller and evaluator), procedure review and approval and training for the Building Emergency Preparedness Personnel on new procedures and development processes.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750		STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	48.00	Hours
Factors	2	RCT	2	hours per drill	12	Drills per year		
750		STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	96.00	Hours
Factors	4	Process Specialist	2	hours per drill	12	Drills per year		
A52		TENERA	P170 OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	85.500.00	Dollars
Factors	95	\$'s/Hour		1800	Hours		0.5	Bepa Consultant

Line Item T15 - Procedures

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - The Procedure Administration function includes development, updating, modifications and issuance of procedures to operate the facility.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
A57		LATA	P160 TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	189.000.00	Dollars
Factors	1.5	Procedure Writers Chartrand Brown-		70	dollars per hour		1800	hours each per year

Line Item T16 - Criticality Engineering

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - The Criticality Engineering function provides the building with criticality safety analysis that is in conformance to applicable standards, rules, and orders, and provides guidance in the form of limits and procedures which ensure the subcriticality of the building's fissile material during handling, processing, and storage operations. Two Criticality Engineers are required plus 0.5 FTE for the Lead Criticality Engineer.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
A5H		SUBCONTRACTED SRVS	E080 NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	153.000.00	Dollars
Factors	85	dollars per hour Malinosky		1800	hours each per year		1	Criticality Safety Engineers Medrick

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Line Item T17 - Plan of the Week/POD

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Plan of the Week (POW) is a meeting held each week to plan all work activities for the coming week, to discuss the current Facility condition and radiological concerns, to update the activity schedule, set priorities, and allocate resources. The Plan of the Week coordinator is funded in this activity.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	936.00	Hours
Factors	18	Hours per week	52	Weeks per year				

Line Item T19 - Project Safety Officer

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Project Safety Officer (A.) Performs required Health and Safety activities, identifies hazards and potential accident producing situations within the work place, and reviews work packages, engineering work orders and equipment installation or maintenance activities for safety systems and interlock functions. Promotes and maintains awareness through employee participation, enforcement of safety rules, accident tracking and trending, and corrective actions.

(B.) Maintains ASME registration and training required to perform required Health and Safety activities noted above.

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	K399S	Building 776 Project	Linear	153.000.00	Dollars
Factors	1	Industrial Hygienist - Farler	1800	Hours per year	85	dollars per hour		

Line Item T20 - Plant Review Committee

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Plant Review Committee, in accordance with 3-T34-SSOC-PRC, provides independent safety reviews for B776/777-related documents (e.g., procedures, IWCPS, Ops Orders, Discovery Issues, etc.) to minimize and mitigate Nuclear Safety impacts and to ensure safe operations within the facility.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	104.00	Hours
Factors	1	Nuclear Safety Professional	2	hours per week	52	Weeks per year		
A5H	SUBCONTRACTED SRVS	E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Project	Linear	8.840.00	Dollars
Factors	1	QA Professional	2	Hours per week	52	weeks per year	85	dollars per hour
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	8.840.00	Dollars
Factors	2	hours per week	52	weeks per year	85	dollars per hour		

Line Item T21 - Health Physics And Instrumentation

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc -

A. Leased Labor cost of calibrations of instruments used by building radiation control personnel and other building personnel: Alphamets - 114 hrs, A-100 - 176 hrs, Mircorem - 90 hrs, DRDs - 46 hrs, SAC-4 - 160 hrs, Electras - 441 hrs, Hi Vol Samplers - 34 Hrs, Lo Vol Samplers - 40 hrs, Ludlum 12-1A - 224 hrs, Ludlum 12-4 - 247 hrs, Ludlum 31 - 7 hrs, Ludlum 2 - 5 hrs, PCM-2 - 1100 hrs, RO-20 - 605 hrs, SAIC AP-2 - 16 hrs, for a total of 3305 hrs

B. Parts, supplies and overhead costs of calibration of instruments used by building radiation control personnel and other building personnel: Balances, O2 Analyzers, magnahelics, photohelics, pressure differentials, torque wrenches, PCM-2s, Ludlums, etc.

Cost Element		Skill		Department		Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	18.000.00	Dollars
Factors	18000	Dollars for supplies						
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	230.934.00	Dollars
Factors	66	dollars per hour	3499	Hours				

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Line Item T22 - Radiological Management

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Rad Ops Management provides technical direction, interpretation and guidance in all aspects of radiological control to ensure effective radiation safety practices and compliance with orders and rules. Also included in this task are routine maintenance activities necessary to support everyday radiological record logkeeping and survey documentation and procurement of routine supplies necessary to support everyday radiological record logkeeping, survey documentation, replacement/additional instrumentation, and personnel safety.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	3,600.00	Hours
Factors	2	Radiological Foreman Sutton, Fields		1800	Hours each			
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	1,000.00	Hours
Factors	1	Off-shift Supervisor		1000	hours per year			
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	540.00	Hours
Factors	0.15	15% Overtime		3600	hours Straight time			
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	25,000.00	Dollars
Factors	25000	Misc Supplies						

Line Item T23 - Criticality Safety Officer

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - The Criticality Safety Officer performs the duties set forth in the Nuclear Criticality Safety Manual including serving as liaison for any criticality safety matters between organizations that have custody of fissionable material and all other organizations, coordination of requests for Critical Safety Engineering, and preparation of criticality safety operations limit postings. Also included are the annual criticality safety assessments for the facility.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	R100S	RMRS Salaried	Linear	1,800.00	Hours
Factors	1800	Hours/ea Panton		1	Crit Safety Officer			

Line Item T24 - Occurrence Reporting

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - This activity consists of support required to maintain occurrence reporting requirements, including preparing and uploading of notifications, conducting investigations and critiques as necessary, processing 10-day update reports, preparing root cause analysis reports and process final reports for DOE approval. In addition, required reading is included in this work scope.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	900.00	Hours
Factors	900	Hours per year		1	Occurrence Reporting Professional			

Line Item T27 - Chemical Control Officer

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - The Chemical Control Officer serves as the single point of contact for chemical management within the Building 776/777 complex, maintains the Chemical Management Plan, maintains a list of chemical storage sites, maintains the Chemical Management Data Base, tracks the quantities of chemicals in the Building 776/777 complex and conducts bi-annual wall-to-wall inventories and random inventories as needed, reviews and approves requisitions for chemicals, maintains Material Safety Data Sheets for chemicals stored in the Building 776/777 complex, works with managers, supervisors and other staff to develop and implement appropriate chemical procedures and practices, and performs the monthly inspections of flammable cabinets.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1,800.00	Hours
Factors	1	Chemical Control Officer		1800	Hours			

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Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
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				Type	Hours/Unit	Total	Total	Activity Filter Cost	& Escalation	Starts In FY Cost		
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	493.516	493.516	0	493.516
T02	Radiological Engineering	1.00	ea	HC	1.800	1.800	61.578	306.000	0	367.578	21.737	389.315
T03	Stepoff Pad	1.00	ea	H	2.574	2.574	56.326	0	0	56.326	19.883	76.209
T04	Contamination Control	1.00	ea	H	515	515	11.265	0	0	11.265	3.977	15.242
T05	Radiological Work Permit	1.00	ea	H	2.317	2.317	50.694	0	0	50.694	17.895	68.588
T06	ALARA Committee	1.00	ea	HC	60	60	1.231	0	0	1.231	435	1.666
T07	Analytical Lab - DAC	9.600.00	each	H	0	0	0	211.200	0	211.200	0	211.200
T08	Nuclear Safety Support	1.00	each	HC	0	0	0	612.000	0	612.000	0	612.000
T10	Electrical Engineering	1.00	ea	H	0	0	0	263.740	0	263.740	0	263.740
T11	Mechanical Engineering	1.00	ea	HC	1.800	1.800	58.986	126.000	0	184.986	20.822	205.808
T13	Fire Protection Engineering	1.00	ea	HC	0	0	0	153.000	0	153.000	0	153.000
T14	Emergency Preparedness	1.00	ea	HC	144	144	2.960	85.500	0	88.460	1.045	89.505
T15	Procedures	1.00	ea	HC	0	0	0	189.000	0	189.000	0	189.000
T16	Criticality Engineering	1.00	ea	HC	0	0	0	153.000	0	153.000	0	153.000
T17	Plan of the Week/DOD	1.00	ea	HC	936	936	24.551	0	0	24.551	8.667	33.218
T19	Project Safety Officer	1.00	each	HC	0	0	0	153.000	0	153.000	0	153.000
T20	Plant Review Committee	1.00	each	HC	104	104	4.500	17.680	0	22.180	1.589	23.769
T21	Health Physics And Instrumentation	1.00	ea	H	0	0	0	248.934	0	248.934	0	248.934
T22	Radiological Management	1.00	each	HC	5.140	5.140	145.641	25.000	0	170.641	51.411	222.053
T23	Criticality Safety Officer	1.00	ea	HC	1.800	1.800	77.886	0	0	77.886	27.494	105.380
T24	Occurrence Reporting	1.00	each	HC	900	900	23.607	0	0	23.607	8.333	31.940
T27	Chemical Control Officer	1.00	ea	HC	1.800	1.800	47.214	0	0	47.214	16.667	63.881
Total for Activity 1DF0302T00:						19.889	566.440	2,544.054	493.516	3,604.010	199.953	3,803.963

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	338.813.90	Dollars
Factors 338814 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	154.702.00	Dollars
Factors 154702 Dollars						

Line Item T02 - Radiological Engineering

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Provides support services for ALARA, IWCPs, Building Assessments, Operation Orders, Technical Bases Documents, Radiological Deficiency Reports, Radiological Work Permits, Device/Source Audit Deliverables, ALARA job reviews and property/waste release evaluation database maintenance and Radiation Protection Program maintenance.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E130 OTHER ENGINEERS	R100S RMRS Salaried	Linear	1.800.00	Hours
Factors 1 Radiological Safety Engineer 1800 hours per year						
A5H	SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	K399S Building 776 Project	Linear	153.000.00	Dollars
Factors 1 Radiological Safety Engineer TBD 1800 hours per year 85 dollars per hour						
A5H	SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	K399S Building 776 Project	Linear	153.000.00	Dollars
Factors 1 Radiological Safety Engineer Grube 1800 hours per year 85 dollars per hour						

Line Item T03 - Stepoff Pad

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity encompasses the radiological monitoring of equipment exiting the Radiological Controlled Areas. The proper release documentation of material and equipment leaving the radiological controlled areas is the responsibility of the set-off pad RCT. The step-off pad RCT responds to any contamination monitor alarm from personnel self-monitoring or personnel requesting help for self-monitoring. Equipment and personnel monitoring are required

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by the Site Radiological Control Manual and DOE Order 5400.5 to ensure the safety of the workers, the public and the environment. The step-off pad RCT also performance tests the instruments used at the step-off pad on a daily basis.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2,340.00Hours
Factors	1	RCT	9	hrs per day	52	weeks	5 days per week
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	234.00Hours
Factors	2340	Total ST hours	0.1	10% Over-Time	1	RCT	

Line Item T04 - Contamination Control

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Identification of contamination sources to prevent the spreading of contamination in controlled areas and individual exposures. Detect contamination in cold areas; provide technical information on amount of contamination and degree of risk an corrective actions. Respond to SAAM alarms on off normal conditions, and respond to loss of contamination control issues, i.e., Radiological contamination of gloves, booties, and personnel. Perform pre-job surveys on misc. minor tasks to ensure the Radiological Work Permits are adequate to control the work performed. Also, decontamination/contamination area rollback will be performed to increase work efficiency, reduce laundry costs, and minimize the generation of of radioactive waste. The process will include walls and floors, as well as all materials and equipment in the area to be downgraded, to be surveyed and/or decontaminated. A representative sample of rooms slated for decontamination is as follows: Rooms: 134E; 430; 463; 452; 131; 134; and 154A.
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	468.00Hours
Factors	2	Hours/day	234	working AWS days			
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	46.80Hours
Factors	0.1	10% Overtime	468	Straight Time Hours			

Line Item T05 - Radiological Work Permit

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Writing and distribution of Radiological Work Permits which define the safe radiological working parameters. Includes maintenance of a filing system to control the number of RWPs released and tracks returns to the RWP office through a daily log. Archiving of expired Radiological Work Permits and their supporting documentation is also performed. Issues and tracks return of Electronic Pocket Dosimeters (EPD). Records and tracks individual doses from EPDs. Files and archives all radiological surveys.
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2,106.00Hours
Factors	1	RCT	9	Hours per day	234	Working AWS days	
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	210.60Hours
Factors	0.1	10% Overtime	2106	Straight Time Hours			

Line Item T06 - ALARA Committee

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Addresses radiological safety concerns and issues that have been identified by the building, programs, or an activity that was conducted. The Chairperson shall be the Operations/Facility Manager, or designee, and the committee shall consist of representatives from departments that support the area. Performs evaluations to determine whether activities are being conducted in accordance with the ALARA Program and implementing procedures. Formulates and coordinates the implementation of the Project Area ALARA goals. Meets monthly on any actions taken to resolve radiological issues, noteworthy ALARA accomplishments, ALARA concerns, etc.. Generates a status report of items discussed and/or acted upon. Includes walk-downs, meetings, reporting, etc..
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	12.00Hours
Factors	1	hour per monthly meeting	1	RCT	12	months	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00Hours
Factors	1	hour per monthly meeting	2	Pipefitters	12	Months	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00Hours
Factors	1	hours per monthly meeting	2	Process Specialists	12	months	

WBS No: 1DAB03
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Line Item T07 - Analytical Lab - DAC

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Lab Support includes Offsite Commercial Support, Hot/Mixed Lab Support, Sample Team Support, and Mobile Lab Support . These activites are described below:									
	DAC Analytical Support - Gross Alpha analysis for the following items:									
	1) Gross Alpha (OS01-02)									
	2) Radiological Screening (OS03-04)									
	3) Gross Alpha/Beta (OS05-17)									
	4) Gross Alpha/Beta - Air Filters (OS18-20)									
	5) Air Filter Loeading, Unloading, and Compositing (OS-21)									
	The type and quantity of the analysis performed is dependent on project customer needs as well as the laboratory capability and capacity.									

Resources			Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE		K267S	Analytical Laboratory Services		Linear		22.00	Dollars
Factors			22	dollars per DAC Sample							

Line Item T08 - Nuclear Safety Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - This function is performed by Nuclear Safety Engineering which provides nuclear technical support, facility safety analysis, Unreviewed Safety Question Determination (USQD) of activities and documents submitted for review, participation in the Operational Review Committee (ORC) process to clarify and advise members on issues concerning USQDs, Safety Evaluation Screens (SEs), and Operational Safety Requirements/Technical Safety Requirements (OSR/TSR) page changes and guidance. Historically, three engineers have been required to perform this scope.									

Resources			Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER		K399S	Building 776 Project		Linear		612,000.00	Dollars
Factors			1	Nuclear Safety Engineer Board,	85	dollars per hour	1800	hours	4	personnel	

Line Item T10 - Electrical Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Electrical Engineering serves as Subject Matter Expert on all electrical power related equipment and systems, supports IWCP, performs engineering operability evaluations on an as-needed basis; supports authorization basis activities, and serves as liaison/Point of Contact with RMRS Central Engineering on building engineering matters. Additionally, This position will provide engineering support for procedure development, system walkdown and one line drawing development, labeling of key components and development of system descriptions.									

Resources			Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E040	ELECTRICAL ENGINEERS		K399S	Building 776 Project		Linear		81,600.00	Dollars
Factors			1	Electrical Engineer All of these are	12	packages per year	80	hours per design modification	85	dollars per hour	
A52	TENERA	E040	ELECTRICAL ENGINEERS		K399S	Building 776 Project		Linear		35,700.00	Dollars
Factors			1	Electrical engineers	12	EOEs per year	35	hours per Engineering Operability	85	dollars per hour	
A52	TENERA	E040	ELECTRICAL ENGINEERS		K399S	Building 776 Project		Linear		53,040.00	Dollars
Factors			2	LO/TOs per week	6	hours support for Lockout/Tagout	52	Weeks per year	85	dollars per hour	
A52	TENERA	E040	ELECTRICAL ENGINEERS		K399S	Building 776 Project		Linear		51,000.00	Dollars
Factors			1	Electrical Engineer	15	ESPs per year	40	hours per Engineering Support	85	dollars per hour	
A57	LATA	E040	ELECTRICAL ENGINEERS		K399S	Building 776 Project		Linear		28,000.00	Dollars
Factors			70	dollars per hour	10	hours support to Standard Work	40	SWPs requiring EE support			
A57	LATA	E040	ELECTRICAL ENGINEERS		K399S	Building 776 Project		Linear		14,400.00	Dollars
Factors			1	electrical engineer	10	calculation in support of various	24	hours per electrical calculation	60	dollars per hour	

Line Item T11 - Mechanical Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									

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Item Desc - Mechanical Engineering serves as a subject matter expert on all mechanical equipment related systems. Additionally, this discipline will provide engineering support for procedure development, system walkdowns, and one line drawing development, labeling of key components, and development of system descriptions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	R100S RMRS Salaried	Linear	1.800.00	Hours
Factors	1	Mechanical Engineer Bentzinger	1800	Hours per year			
A57		LATA	E070 MECHANICAL ENGINEERS	K399S Building 776 Project	Linear	126.000.00	Dollars
Factors	70	dollars per hour Barr	1	Mechanical Engineers	1800	hours each per year	

Line Item T13 - Fire Protection Engineering

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - Fire Protection Engineering provides technical support and fire hazards analysis for the building.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H		SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	K252S Engineering	Linear	153.000.00	Dollars
Factors	85	dollars per hour Lanning	1800	hours			

Line Item T14 - Emergency Preparedness

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - Administers the implementation of the RFETS Emergency Preparedness Program for the protection of personnel, the public, and the environment during emergency response. Develops and implements of the Building Emergency Program, provides technical assistance to building management for development and conduct of building drills, provides procedure review and approval and trains the Building Emergency Preparedness Personnel on new procedures and development processes.
A. Develop/conduct building emergency drills.
B./C./D. Drill controller/evaluator.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	48.00	Hours
Factors	2	RCT	2	hours per drill	12	Drills per year	
750		STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	96.00	Hours
Factors	4	Process Specialist	2	hours per drill	12	Drills per year	
A52		TENERA	P170 OTHER ADMINISTRATIVE & PROFE	K399S Building 776 Project	Linear	85.500.00	Dollars
Factors	95	\$/s/Hour	1800	Hours	0.5	Bepa Consultant	

Line Item T15 - Procedures

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - The Procedure Administration function includes development, updates, modifications and issuance of procedures to operate the facility.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A57		LATA	P160 TECHNICAL WRITERS AND EDITOR	K399S Building 776 Project	Linear	189.000.00	Dollars
Factors	1.5	Procedure Writers Chartrand Brown-	70	dollars per hour	1800	hours each per year	

Line Item T16 - Criticality Engineering

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc - The Criticality Engineer provides the building with criticality safety analysis that is in conformance to applicable standards, rules, and orders to provide guidance in the form of limits and procedures which ensure the subcriticality of the building's fissile material handling, processing, and storage operations. Two Criticality Engineers are required plus 0.5 for the Lead Criticality Engineer.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
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A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	153.000.00	Dollars
Factors	85	dollars per hour	Malinosky	1800	hours each per year	1	Criticality Safety Engineers Medrick	

Line Item T17 - Plan of the Week/DOD

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - The Plan of the Week (POW) is a meeting held each week to plan all work activities for the coming week, discuss the current Facility condition, radiological concerns, to update the activity schedule, set priorities, and allocate resources. The Plan of the Week coordinator is funded in this activity.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	936.00	Hours
	Factors	18	Hours per week	52	Weeks per year				

Line Item T19 - Project Safety Officer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - A. Perform required Health and Safety activities. Identify hazards and potential accident producing situations within the work place. Review work packages, engineering work orders and equipment installation or maintenance for safety systems and interlock functions. Promote and maintain awareness through employee participation, enforcement of safety rules, accident tracking, and trending and corrective actions. B. ASME registration and training required to perform required Health and Safety activities above.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	K399S	Building 776 Project	Linear	153,000.00	Dollars
	Factors	1	Industrial Hygienist - Farler	1800	Hours per year	85	dollars per hour		

Line Item T20 - Plant Review Committee

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Plant Review Committee is a new requirement being planned for in FY-99.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	R100S	RMRS Salaried	Linear	104.00	Hours
	Factors	1	Nuclear Safety Professional	2	hours per week	52	Weeks per year		
	A5H	SUBCONTRACTED SRVS	E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Project	Linear	8.840.00	Dollars
	Factors	1	QA Professional	2	Hours per week	52	weeks per year	85	dollars per hour
	A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	8.840.00	Dollars
	Factors	2	hours per week	52	weeks per year	85	dollars per hour		

Line Item T21 - Health Physics And Instrumentation

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - A. Leased Labor cost of calibrations of instruments used by building radiation control personnel and other building personnel: Alphamets - 114 hrs, A-100 - 176 hrs, Mircorem - 90 hrs, DRDs - 46 hrs, SAC-4 - 160 hrs, Electras - 441 hrs, Hi Vol Samplers - 34 Hrs, Lo Vol Samplers - 40 hrs, Ludlum 12-1A - 224 hrs, Ludlum 12-4 - 247 hrs, Ludlum 31 - 7 hrs, Ludlum 2 - 5 hrs, PCM-2 - 1100 hrs, RO-20 - 605 hrs, SAIC AP-2 - 16 hrs, for a total of 3305 hrs B. Parts, supplies and overhead costs of calibration of instruments used by building radiation control personnel and other building personnel: Balances, O2 Analyzers, magnahelics, photohelics, pressure differentials, torque wrenches, PCM-2s, Ludlums, etc.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	18.000.00	Dollars
	Factors	18000 Dollars for supplies							
	A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	230.934.00	Dollars
	Factors	66 dollars per hour		3499 Hours					

Line Item T22 - Radiological Management

BOE								
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Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc -

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750		STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	3,600.00	Hours
Factors	2	Radiological Foreman Sutton, Fields		1800	Hours each			
750		STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	1,000.00	Hours
Factors	1	Off-shift Supervisor		1000	hours per year			
751		OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	540.00	Hours
Factors	0.15	15% Overtime		3600	hours Straight time			
A5C		SUPPLIES	0000 NONE	K399S	Building 776 Project	Linear	25,000.00	Dollars
Factors	25000	Misc Supplies						

Line Item T23 - Criticality Safety Officer

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc -
The Criticality Safety Officer performs the duties set forth in the Nuclear Criticality Safety Manual including serving as liaison for the criticality safety matters between organizations that have custody of fissionable material and all other organizations, coordination of requests for Critical Safety Engineer, and preparation of criticality safety limit postings. Also included is the annual assessments.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750		STRAIGHT TIME BASE	E080 NUCLEAR (CRITICALITY) ENGINEER	R100S	RMRS Salaried	Linear	1,800.00	Hours
Factors	1800	Hours/ea Panton		1	Crit Safety Officer			

Line Item T24 - Occurrence Reporting

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of support required to maintain occurrence reporting requirements, including preparing and uploading of notifications, conducting investigations and critiques as necessary, processing 10-day update reports, preparing root cause analysis reports and process final reports for DOE approval. In addition, required reading is included in this work scope.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750		STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	900.00	Hours
Factors	900	Hours per year		1	Occurrence Reporting Professional			

Line Item T27 - Chemical Control Officer

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Serves as the single point of contact for chemical management within the Building 776/777 complex, maintains the Chemical Management Plan, maintains a list of chemical storage sites, maintains the Chemical Management Data Base, tracks the quantities of chemicals in the Building 776/777 complex and conducts bi-annual wall-to-wall inventories and random inventories as needed, reviews and approves requisitions for chemicals, maintains Material Safety Data Sheets for chemicals stored in the Building 776/777 complex, works with managers, supervisors and other staff to develop and implement appropriate chemical procedures and practices and performs the monthly inspections of flammable cabinets.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750		STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1,800.00	Hours
Factors	1	Chemical Control Officer		1800	Hours			

Activity ID: 1DF0303T00 Description: FY-03 B776 Operations Technical Support

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	914.418	914.418	0	914.418
IT02	Radiological Engineering	1.00	ea	HC	1.800	1.800	61.578	306.000	0	367.578	21.306	388.884

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T03	Stepoff Pad	1.00	ea	H	2,574	2,574	56,326	0	0	56,326	19,489	75,815	
T04	Contamination Control	1.00	ea	H	515	515	11,265	0	0	11,265	3,898	15,163	
T05	Radiological Work Permit	1.00	ea	H	2,317	2,317	50,694	0	0	50,694	17,540	68,233	
T06	ALARA Committee	1.00	ea	HC	60	60	1,231	0	0	1,231	426	1,657	
T07	Analytical Lab - DAC	9,600.00	each	H	0	0	0	211,200	0	211,200	0	211,200	
T08	Nuclear Safety Support	1.00	each	HC	0	0	0	612,000	0	612,000	0	612,000	
T10	Electrical Engineering	1.00	ea	H	0	0	0	263,740	0	263,740	0	263,740	
T11	Mechanical Engineering	1.00	ea	HC	1,800	1,800	58,986	126,000	0	184,986	20,409	205,395	
T13	Fire Protection Engineering	1.00	ea	HC	0	0	0	153,000	0	153,000	0	153,000	
T14	Emergency Preparedness	1.00	ea	HC	144	144	2,960	85,500	0	88,460	1,024	89,484	
T15	Procedures	1.00	ea	HC	0	0	0	189,000	0	189,000	0	189,000	
T16	Criticality Engineering	1.00	ea	HC	0	0	0	153,000	0	153,000	0	153,000	
T17	Plan of the Week/DOD	1.00	ea	HC	936	936	24,551	0	0	24,551	8,495	33,046	
T19	Project Safety Officer	1.00	each	HC	0	0	0	153,000	0	153,000	0	153,000	
T20	Plant Review Committee	1.00	each	HC	104	104	4,500	17,680	0	22,180	1,557	23,737	
T21	Health Physics And Instrumentation	1.00	ea	H	0	0	0	248,934	0	248,934	0	248,934	
T22	Radiological Management	1.00	each	HC	5,140	5,140	145,641	25,000	0	170,641	50,392	221,033	
T23	Criticality Safety Officer	1.00	ea	HC	1,800	1,800	77,886	0	0	77,886	26,949	104,835	
T24	Occurrence Reporting	1.00	each	HC	900	900	23,607	0	0	23,607	8,168	31,775	
T27	Chemical Control Officer	1.00	ea	HC	1,800	1,800	47,214	0	0	47,214	16,336	63,550	
Total for Activity 1DF0303T00:							19,889	566,440	2,544,054	914,418	4,024,912	195,988	4,220,900

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
CON		CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	660,859.10	Dollars
Factors		660859 Dollars							
ESC		ESCALATION	0000	NONE	ZDEPT	No Department	Linear	253,558.50	Dollars
Factors		253559 Dollars							

Line Item T02 - Radiological Engineering

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Provides support services for ALARA, IWCPs, Building Assessments, Operation Orders, Technical Bases Documents, Radiological Deficiency Reports, Radiological Work Permits, Device/Source Audit Deliverables, ALARA job reviews and property/waste release evaluation database maintenance and Radiation Protection Program maintenance.

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750		STRAIGHT TIME BASE	E130	OTHER ENGINEERS	R100S	RMRS Salaried	Linear	1,800.00	Hours
Factors		1 Radiological Safety Engineer 1800 hours per year							
A5H		SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K399S	Building 776 Project	Linear	153,000.00	Dollars
Factors		1 Radiological Safety Engineer TBD 1800 hours per year 85 dollars per hour							
A5H		SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K399S	Building 776 Project	Linear	153,000.00	Dollars
Factors		1 Radiological Safety Engineer Grube 1800 hours per year 85 dollars per hour							

Line Item T03 - Stepoff Pad

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity encompasses the radiological monitoring of equipment exiting the Radiological Controlled Areas. The proper release documentation of material and equipment leaving the radiological controlled areas is the responsibility of the set-off pad RCT. The step-off pad RCT responds to any contamination monitor alarm from personnel self-monitoring or personnel requesting help for self-monitoring. Equipment and personnel monitoring are required by the Site Radiological Control Manual and DOE Order 5400.5 to ensure the safety of the workers, the public and the environment. The step-off pad RCT also performance tests the instruments used at the step-off pad on a daily basis.

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
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750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	2,340.00	Hours
Factors	1 RCT	9	hrs per day	52	weeks	5	days per week	
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	234.00	Hours
Factors	2340 Total ST hours	0.1	10% Over-Time	1	RCT			

Line Item T04 - Contamination Control

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Identification of contamination sources to prevent the spreading of contamination in controlled areas and individual exposures. Detect contamination in cold areas; provide technical information on amount of contamination and degree of risk an corrective actions. Respond to SAAM alarms on off normal conditions, and respond to loss of contamination control issues, i.e., Radiological contamination of gloves, booties, and personnel. Perform pre-job surveys on misc. minor tasks to ensure the Radiological Work Permits are adequate to control the work performed. Also, decontamination/contamination area rollback will be performed to increase work efficiency, reduce laundry costs, and minimize the generation of radioactive waste. The process will include walls and floors, as well as all materials and equipment in the area to be downgraded, to be surveyed and/or decontaminated. A representative sample of rooms slated for decontamination is as follows: Rooms: 134E; 430; 463; 452; 131; 134; and 154A.							
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	468.00	Hours
	Factors	2	Hours/day	234	working AWS days					
	751	OVERTIME BASE & PRE.		T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	46.80	Hours
	Factors	0.1	10% Overtime	468	Straight Time Hours					

Line Item T05 - Radiological Work Permit

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Writing and distribution of Radiological Work Permits which define the safe radiological working parameters. Includes maintenance of a filing system to control the number of RWPs released and tracks returns to the RWP office through a daily log. Archiving of expired Radiological Work Permits and their supporting documentation is also performed. Issues and tracks return of Electronic Pocket Dosimeters (EPD). Records and tracks individual doses from EPDs. Files and archives all radiological surveys.							
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	2,106.00	Hours
	Factors	1	RCT	9	Hours per day	234	Working AWS days			
	751	OVERTIME BASE & PRE.		T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	210.60	Hours
	Factors	0.1	10% Overtime	2106	Straight Time Hours					

Line Item T06 - ALARA Committee

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Addresses radiological safety concerns and issues that have been identified by the building, programs, or an activity that was conducted. The Chairperson shall be the Operations/Facility Manager, or designee, and the committee shall consist of representatives from departments that support the area. Performs evaluations to determine whether activities are being conducted in accordance with the ALARA Program and implementing procedures. Formulates and coordinates the implementation of the Project Area ALARA goals. Meets monthly on any actions taken to resolve radiological issues, noteworthy ALARA accomplishments, ALARA concerns, etc.. Generates a status report of items discussed and/or acted upon. Includes walk-downs, meetings, reporting, etc..							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
	Factors	1 hour per monthly meeting	1	RCT	12	months			
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00	Hours
	Factors	1 hour per monthly meeting	2	Pipefitters	12	Months			
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00	Hours
	Factors	1 hours per monthly meeting	2	Process Specialists	12	months			

Line Item T07 - Analytical Lab - DAC

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
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Item Desc - Lab Support includes Offsite Commercial Support, Hot/Mixed Lab Support, Sample Team Support, and Mobile Lab Support . These activities are described below:

DAC Analytical Support - Gross Alpha analysis for the following items:

- 1) Gross Alpha (OS01-02)
- 2) Radiological Screening (OS03-04)
- 3) Gross Alpha/Beta (OS05-17)
- 4) Gross Alpha/Beta - Air Filters (OS18-20)
- 5) Air Filter Loading, Unloading, and Compositing (OS-21)

The type and quantity of the analysis performed is dependent on project customer needs as well as the laboratory capability and capacity.

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analvtical Laboratory Services	Linear	22.00	Dollars

Factors 22 dollars per DAC Sample

Line Item T08 - Nuclear Safety Support

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This function is performed by Nuclear Safety Engineering which provides nuclear technical support, facility safety analysis, Unreviewed Safety Question Determination (USQD) of activities and documents submitted for review, participation in the Operational Review Committee (ORC) process to clarify and advise members on issues concerning USQDs, Safety Evaluation Screens (SEs), and Operational Safety Requirements/Technical Safety Requirements (OSR/TSR) page changes and guidance. Historically, three engineers have been required to perform this scope.

Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	612.000.00	Dollars

Factors 1 Nuclear Safety Engineer Board. 85 dollars per hour 1800 hours 4 personnel

Line Item T10 - Electrical Engineering

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Electrical Engineering serves as Subject Matter Expert on all electrical power related equipment and systems, supports IWCP, performs engineering operability evaluations on an as-needed basis; supports authorization basis activities, and serves as liaison/Point of Contact with RMRS Central Engineering on building engineering matters. Additionally, This position will provide engineering support for procedure development, system walkdown and one line drawing development, labeling of key components and development of system descriptions.

Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	81.600.00	Dollars

Factors 1 Electrical Engineer All of these are 12 packages per year 80 hours per design modification 85 dollars per hour

A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	35.700.00	Dollars
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Factors 1 Electrical engineers 12 EOs per year 35 hours per Engineering Operability 85 dollars per hour

A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	53.040.00	Dollars
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Factors 2 LO/TOs per week 6 hours support for Lockout/Tagout 52 Weeks per year 85 dollars per hour

A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	51.000.00	Dollars
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Factors 1 Electrical Engineer 15 ESPs per year 40 hours per Engineering Support 85 dollars per hour

A57	LATA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	28.000.00	Dollars
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Factors 70 dollars per hour 10 hours support to Standard Work 40 SWPs requiring EE support

A57	LATA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	14.400.00	Dollars
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Factors 1 electrical engineer 10 calculation in support of various 24 hours per electrical calculation 60 dollars per hour

Line Item T11 - Mechanical Engineering

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Mechanical Engineering serves as a subject matter expert on all mechanical equipment related systems. Additionally, this discipline will provide engineering support for procedure development, system walkdowns, and one line drawing development, labeling of key components, and development of system descriptions.

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	R100S	RMRS Salaried	Linear	1.800.00	Hours
Factors 1 Mechanical Engineer Bentzinger 1800 Hours per year									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A57	LATA	E070	MECHANICAL ENGINEERS	K399S	Building 776 Project	Linear	126.000.00	Dollars
Factors 70 dollars per hour Barr 1 Mechanical Engineers 1800 hours each per year									

Line Item T13 - Fire Protection Engineering

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K252S	Engineering	Linear	153.000.00	Dollars
Factors 85 dollars per hour Lanning 1800 hours									

Line Item T14 - Emergency Preparedness

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Administers the implementation of the RFETS Emergency Preparedness Program for the protection of personnel, the public, and the environment during emergency response. Develops and implements of the Building Emergency Program, provides technical assistance to building management for development and conduct of building drills, provides procedure review and approval and trains the Building Emergency Preparedness Personnel on new procedures and development processes.

A. Develop/conduct building emergency drills.

B./C./D. Drill controller/evaluator.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	48.00	Hours
Factors 2 RCT 2 hours per drill 12 Drills per year									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	96.00	Hours
Factors 4 Process Specialist 2 hours per drill 12 Drills per year									
Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A52	TENERA	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	85.500.00	Dollars
Factors 95 \$/s/Hour 1800 Hours 0.5 Bepa Consultant									

Line Item T15 - Procedures

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Procedure Administration function includes development, updates, modifications and issuance of procedures to operate the facility.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	189.000.00	Dollars
Factors 1.5 Procedure Writers Chartrand Brown- 70 dollars per hour 1800 hours each per year									

Line Item T16 - Criticality Engineering

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Criticality Engineer provides the building with criticality safety analysis that is in conformance to applicable standards, rules, and orders to provide guidance in the form of limits and procedures which ensure the subcriticality of the building's fissile material handling, processing, and storage operations. Two Criticality Engineers are required plus 0.5 for the Lead Criticality Engineer.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	153.000.00	Dollars
Factors 85 dollars per hour Malinoskv 1800 hours each per year 1 Criticality Safety Engineers Medrick									

Line Item T17 - Plan of the Week/DOD

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

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Item Desc - The Plan of the Week (POW) is a meeting held each week to plan all work activities for the coming week, discuss the current Facility condition, radiological concerns, to update the activity schedule, set priorities, and allocate resources. The Plan of the Week coordinator is funded in this activity.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	936.00
Factors	18	Hours per week	52	Weeks per year			Hours

Line Item T19 - Project Safety Officer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - A. Perform required Health and Safety activities. Identify hazards and potential accident producing situations within the work place. Review work packages, engineering work orders and equipment installation or maintenance for safety systems and interlock functions. Promote and maintain awareness through employee participation, enforcement of safety rules, accident tracking, and trending and corrective actions. B. ASME registration and training required to perform required Health and Safety activities above.
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	K399S	Building 776 Project	Linear	153.000.00
Factors	1	Industrial Hygienist - Farler	1800	Hours per year	85	dollars per hour	Dollars

Line Item T20 - Plant Review Committee

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Plant Review Committee is a new requirement being planned for in FY-99.
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	104.00
Factors	1	Nuclear Safety Professional	2	hours per week	52	Weeks per year	Hours
A5H	SUBCONTRACTED SRVS	E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Project	Linear	8.840.00
Factors	1	QA Professional	2	Hours per week	52	weeks per year	Dollars
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	8.840.00
Factors	2	hours per week	52	weeks per year	85	dollars per hour	Dollars

Line Item T21 - Health Physics And Instrumentation

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - A. Leased Labor cost of calibrations of instruments used by building radiation control personnel and other building personnel: Alphamets - 114 hrs, A-100 - 176 hrs, Mircorem - 90 hrs, DRDs - 46 hrs, SAC-4 - 160 hrs, Electras - 441 hrs, Hi Vol Samplers - 34 Hrs, Lo Vol Samplers - 40 hrs, Ludlum 12-1A - 224 hrs, Ludlum 12-4 - 247 hrs, Ludlum 31 - 7 hrs, Ludlum 2 - 5 hrs, PCM-2 - 1100 hrs, RO-20 - 605 hrs, SAIC AP-2 - 16 hrs, for a total of 3305 hrs B. Parts, supplies and overhead costs of calibration of instruments used by building radiation control personnel and other building personnel: Balances, O2 Analyzers, magnahelics, photohelics, pressure differentials, torque wrenches, PCM-2s, Ludlums, etc.
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	18.000.00
Factors	18000	Dollars for supplies					Dollars
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	230.934.00
Factors	66	dollars per hour	3499	Hours			Dollars

Line Item T22 - Radiological Management

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc -
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
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750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	3,600.00	Hours
Factors	2	Radiological Foreman Sutton, Fields	1800	Hours each				
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	1,000.00	Hours
Factors	1	Off-shift Supervisor	1000	hours per year				
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	540.00	Hours
Factors	0.15	15% Overtime	3600	hours Straight time				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	25,000.00	Dollars
Factors	25000	Misc Supplies						

Line Item T23 - Criticality Safety Officer

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc -
The Criticality Safety Officer performs the duties set forth in the Nuclear Criticality Safety Manual including serving as liaison for the criticality safety matters between organizations that have custody of fissionable material and all other organizations, coordination of requests for Critical Safety Engineer, and preparation of criticality safety limit postings. Also included is the annual assessments.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		E080	NUCLEAR (CRITICALITY) ENGINEER	R100S	RMRS Salaried	Linear	1,800.00	Hours
Factors	1800	Hours/ea Pantan	1	Crit Safety Officer					

Line Item T24 - Occurrence Reporting

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity consists of support required to maintain occurrence reporting requirements, including preparing and uploading of notifications, conducting investigations and critiques as necessary, processing 10-day update reports, preparing root cause analysis reports and process final reports for DOE approval. In addition, required reading is included in this work scope.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	900.00	Hours
Factors	900	Hours per year	1	Occurrence Reporting Professional					

Line Item T27 - Chemical Control Officer

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Serves as the single point of contact for chemical management within the Building 776/777 complex, maintains the Chemical Management Plan, maintains a list of chemical storage sites, maintains the Chemical Management Data Base, tracks the quantities of chemicals in the Building 776/777 complex and conducts bi-annual wall-to-wall inventories and random inventories as needed, reviews and approves requisitions for chemicals, maintains Material Safety Data Sheets for chemicals stored in the Building 776/777 complex, works with managers, supervisors and other staff to develop and implement appropriate chemical procedures and practices and performs the monthly inspections of flammable cabinets.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1,800.00	Hours
Factors	1	Chemical Control Officer	1800	Hours				

Activity ID: 1DXXXFT00 Description: End of B776 Operations Technical Support

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	306.615	306.615	0	306.615
T02	Radiological Engineering	0.66	ea	HC	1,800	1,184	40,512	201,316	0	241,828	11,424	253,252
T03	Stepoff Pad	0.66	ea	H	2,574	1,693	37,057	0	0	37,057	10,450	47,507
T04	Contamination Control	0.66	ea	H	515	339	7,411	0	0	7,411	2,090	9,501
T05	Radiological Work Permit	0.66	ea	H	2,317	1,524	33,351	0	0	33,351	9,405	42,756
T06	ALARA Committee	0.66	ea	HC	60	39	810	0	0	810	228	1,038
T07	Analytical Lab - DAC	6,315.79	each	H	0	0	0	138,947	0	138,947	0	138,947
T08	Nuclear Safety Support	0.66	each	HC	0	0	0	402,632	0	402,632	0	402,632

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T10	Electrical Engineering	0.66	ea	H	0	0	0	173.513	0	173.513	0	173.513
T11	Mechanical Engineering	0.66	ea	HC	1.800	1.184	38.807	82.895	0	121.701	10.943	132.645
T13	Fire Protection Engineering	0.66	ea	HC	0	0	0	100.658	0	100.658	0	100.658
T14	Emergency Preparedness	0.66	ea	HC	144	95	1.947	56.250	0	58.197	549	58.747
T15	Procedures	0.66	ea	HC	0	0	0	124.342	0	124.342	0	124.342
T16	Criticality Engineering	0.66	ea	HC	0	0	0	100.658	0	100.658	0	100.658
T17	Plan of the Week/DOD	0.66	ea	HC	936	616	16.152	0	0	16.152	4.555	20.707
T19	Project Safety Officer	0.66	each	HC	0	0	0	100.658	0	100.658	0	100.658
T20	Plant Review Committee	0.66	each	HC	104	68	2.961	11.632	0	14.592	835	15.427
T21	Health Physics And Instrumentation	0.66	ea	H	0	0	0	163.772	0	163.772	0	163.772
T22	Radiological Management	0.66	each	HC	5.140	3.382	95.817	16.447	0	112.264	27.020	139.284
T23	Criticality Safety Officer	0.66	ea	HC	1.800	1.184	51.241	0	0	51.241	14.450	65.691
T24	Occurrence Reporting	0.66	each	HC	900	592	15.531	0	0	15.531	4.380	19.911
T27	Chemical Control Officer	0.66	ea	HC	1.800	1.184	31.062	0	0	31.062	8.759	39.821
Total for Activity 1DXXXFT00:						13.085	372.658	1.673.720	306.615	2.352.993	105.090	2.458.082

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON		CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	100.039.30	Dollars
Factors		100039 Dollars					
ESC		ESCALATION	0000 NONE	ZDEPT No Department	Linear	206.575.80	Dollars
Factors		206576 Dollars					

Line Item T02 - Radiological Engineering

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Provides support services for ALARA, IWCPs, Building Assessments, Operation Orders, Technical Bases Documents, Radiological Deficiency Reports, Radiological Work Permits, Device/Source Audit Deliverables, ALARA job reviews and property/waste release evaluation database maintenance and Radiation Protection Program maintenance.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	E130 OTHER ENGINEERS	R100S RMRS Salaried	Linear	1.800.00	Hours
Factors		1 Radiological Safety Engineer 1800 hours per year					
A5H		SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	K399S Building 776 Project	Linear	153.000.00	Dollars
Factors		1 Radiological Safety Engineer Grube 1800 hours per year 85 dollars per hour					
A5H		SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	K399S Building 776 Project	Linear	153.000.00	Dollars
Factors		1 Radiological Safety Engineer TBD 1800 hours per year 85 dollars per hour					

Line Item T03 - Stepoff Pad

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity encompasses the radiological monitoring of equipment exiting the Radiological Controlled Areas. The proper release documentation of material and equipment leaving the radiological controlled areas is the responsibility of the set-off pad RCT. The step-off pad RCT responds to any contamination monitor alarm from personnel self-monitoring or personnel requesting help for self-monitoring. Equipment and personnel monitoring are required by the Site Radiological Control Manual and DOE Order 5400.5 to ensure the safety of the workers, the public and the environment. The step-off pad RCT also performance tests the instruments used at the step-off pad on a daily basis.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	2.340.00	Hours
Factors		1 RCT 9 hrs per day 52 weeks 5 days per week					
751		OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	234.00	Hours
Factors		2340 Total ST hours 0.1 10% Over-Time 1 RCT					

Line Item T04 - Contamination Control

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item

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level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Identification of contamination sources to prevent the spreading of contamination in controlled areas and individual exposures. Detect contamination in cold areas; provide technical information on amount of contamination and degree of risk an corrective actions. Respond to SAAM alarms on off normal conditions, and respond to loss of contamination control issues, i.e., Radiological contamination of gloves, booties, and personnel. Perform pre-job surveys on misc. minor tasks to ensure the Radiological Work Permits are adequate to control the work performed. Also, decontamination/contamination area rollback will be performed to increase work efficiency, reduce laundry costs, and minimize the generation of of radioactive waste. The process will include walls and floors, as well as all materials and equipment in the area to be downgraded, to be surveyed and/or decontaminated. A representative sample of rooms slated for decontamination is as follows: Rooms: 134E; 430; 463; 452; 131; 134; and 154A.

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	468.00	Hours
Factors		2	Hours/day	234	working AWS days				
751	OVERTIME BASE & PRE.		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	46.80	Hours
Factors		0.1	10% Overtime	468	Straight Time Hours				

Line Item T05 - Radiological Work Permit

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Writing and distribution of Radiological Work Permits which define the safe radiological working parameters. Includes maintenance of a filing system to control the number of RWPs released and tracks returns to the RWP office through a daily log. Archiving of expired Radiological Work Permits and their supporting documentation is also performed. Issues and tracks return of Electronic Pocket Dosimeters (EPD). Records and tracks individual doses from EPDs. Files and archives all radiological surveys.									

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2,106.00	Hours
Factors		1	RCT	9	Hours per day	234	Working AWS days		
751	OVERTIME BASE & PRE.		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	210.60	Hours
Factors		0.1	10% Overtime	2106	Straight Time Hours				

Line Item T06 - ALARA Committee

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Addresses radiological safety concerns and issues that have been identified by the building, programs, or an activity that was conducted. The Chairperson shall be the Operations/Facility Manager, or designee, and the committee shall consist of representatives from departments that support the area. Performs evaluations to determine whether activities are being conducted in accordance with the ALARA Program and implementing procedures. Formulates and coordinates the implementation of the Project Area ALARA goals. Meets monthly on any actions taken to resolve radiological issues, noteworthy ALARA accomplishments, ALARA concerns, etc.. Generates a status report of items discussed and/or acted upon. Includes walk-downs, meetings, reporting, etc..									

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
Factors		1	hour per monthly meeting	1	RCT	12	months		
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00	Hours
Factors		1	hour per monthly meeting	2	Pipefitters	12	Months		
750	STRAIGHT TIME BASE		T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00	Hours
Factors		1	hours per monthly meeting	2	Process Specialists	12	months		

Line Item T07 - Analytical Lab - DAC

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Lab Support includes Offsite Commercial Support, Hot/Mixed Lab Support, Sample Team Support, and Mobile Lab Support . These activites are described below:									
	DAC Analytical Support - Gross Alpha analysis for the following items:									
	1) Gross Alpha (OS01-02) 2) Radiological Screening (OS03-04)									

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- 3) Gross Alpha/Beta (OS05-17)
4) Gross Alpha/Beta - Air Filters (OS18-20)
5) Air Filter Loading, Unloading, and Compositing (OS-21)

The type and quantity of the analysis performed is dependent on project customer needs as well as the laboratory capability and capacity.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analvtical Laboratory Services	Linear	22.00Dollars
Factors	22	dollars per DAC Sample					

Line Item T08 - Nuclear Safety Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - This function is performed by Nuclear Safety Engineering which provides nuclear technical support, facility safety analysis, Unreviewed Safety Question Determination (USQD) of activities and documents submitted for review, participation in the Operational Review Committee (ORC) process to clarify and advise members on issues concerning USQDs, Safety Evaluation Screens (SESs), and Operational Safety Requirements/Technical Safety Requirements (OSR/TSR) page changes and guidance. Historically, three engineers have been required to perform this scope.						
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	612,000.00	Dollars
	Factors	1	Nuclear Safety Engineer Board,	85	dollars per hour	1800	hours	4	personnel

Line Item T10 - Electrical Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Electrical Engineering serves as Subject Matter Expert on all electrical power related equipment and systems, supports IWCP, performs engineering operability evaluations on an as-needed basis; supports authorization basis activities, and serves as liaison/Point of Contact with RMRS Central Engineering on building engineering matters. Additionally, This position will provide engineering support for procedure development, system walkdown and one line drawing development, labeling of key components and development of system descriptions.						
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	81.600.00	Dollars
Factors	1	Electrical Engineer All of these are	12	packages per year	80	hours per design modification	85	dollars per hour	
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project		Linear	35.700.00	Dollars
Factors	1	Electrical engineers	12	EOEs per year	35	hours per Engineering Operability	85	dollars per hour	
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project		Linear	53.040.00	Dollars
Factors	2	LO/TOs per week	6	hours support for Lockout/Tagout	52	Weeks per year	85	dollars per hour	
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project		Linear	51.000.00	Dollars
Factors	1	Electrical Engineer	15	ESPs per year	40	hours per Engineering Support	85	dollars per hour	
A57	LATA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project		Linear	28.000.00	Dollars
Factors	70	dollars per hour	10	hours support to Standard Work	40	SWPs requiring EE support			
A57	LATA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project		Linear	14.400.00	Dollars
Factors	1	electrical engineer	10	calculation in support of various	24	hours per electrical calculation	60	dollars per hour	

Line Item T11 - Mechanical Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Mechanical Engineering serves as a subject matter expert on all mechanical equipment related systems. Additionally, this discipline will provide engineering support for procedure development, system walkdowns, and one line drawing development, labeling of key components, and development of system descriptions.						
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	R100S	RMRS Salaried	Linear	1.800.00Hours
Factors	1	Mechanical Engineer Bentzinaer	1800	Hours per year			
A57	LATA	E070	MECHANICAL ENGINEERS	K399S	Building 776 Project	Linear	126.000.00Dollars
Factors	70	dollars per hour Barr	1	Mechanical Engineers	1800	hours each per year	

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Line Item T13 - Fire Protection Engineering

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K252S	Engineering	Linear	153.000.00	Dollars
Factors	85	dollars per hour	Lanning	1800	hours			

Line Item T14 - Emergency Preparedness

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Administers the implementation of the RFETS Emergency Preparedness Program for the protection of personnel, the public, and the environment during emergency response. Develops and implements of the Building Emergency Program, provides technical assistance to building management for development and conduct of building drills, provides procedure review and approval and trains the Building Emergency Preparedness Personnel on new procedures and development processes.

A. Develop/conduct building emergency drills.

B./C./D. Drill controller/evaluator.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	48.00	Hours
Factors	2	RCT	2	hours per drill	12	Drills per year		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	96.00	Hours
Factors	4	Process Specialist	2	hours per drill	12	Drills per year		
A52	TENERA	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	85.500.00	Dollars
Factors	95	\$'s/Hour	1800	Hours	0.5	Bepa Consultant		

Line Item T15 - Procedures

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Procedure Administration function includes development, updates, modifications and issuance of procedures to operate the facility.

Cost Element		Skill		Department		Curve	Quantity	Units
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	189.000.00	Dollars
Factors	1.5	Procedure Writers	Chartrand Brown-	70	dollars per hour	1800	hours each per year	

Line Item T16 - Criticality Engineering

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Criticality Engineer provides the building with criticality safety analysis that is in conformance to applicable standards, rules, and orders to provide guidance in the form of limits and procedures which ensure the subcriticality of the building's fissile material handling, processing, and storage operations. Two Criticality Engineers are required plus 0.5 for the Lead Criticality Engineer.

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	153.000.00	Dollars
Factors	85	dollars per hour	Malinosky	1800	hours each per year	1	Criticality Safety Engineers	Medrick

Line Item T17 - Plan of the Week/DOD

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Plan of the Week (POW) is a meeting held each week to plan all work activities for the coming week, discuss the current Facility condition, radiological concerns, to update the activity schedule, set priorities, and allocate resources. The Plan of the Week coordinator is funded in this activity.

Cost Element		Skill		Department		Curve	Quantity	Units
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750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	936.00	Hours
Factors	18	Hours per week	52	Weeks per year				

Line Item T19 - Project Safety Officer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - A. Perform required Health and Safety activities. Identify hazards and potential accident producing situations within the work place. Review work packages, engineering work orders and equipment installation or maintenance for safety systems and interlock functions. Promote and maintain awareness through employee participation, enforcement of safety rules, accident tracking, and trending and corrective actions. B. ASME registration and training required to perform required Health and Safety activities above.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	K399S	Building 776 Project	Linear	153,000.00	Dollars
	Factors	1	Industrial Hygienist - Farler	1800	Hours per year	85	dollars per hour		

Line Item T20 - Plant Review Committee

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Plant Review Committee is a new requirement being planned for in FY-99.							
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	104.00	Hours
	Factors	1	Nuclear Safety Professional	2	hours per week	52	Weeks per year			
	A5H	SUBCONTRACTED SRVS		E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Project	Linear	8,840.00	Dollars
	Factors	1	QA Professional	2	Hours per week	52	weeks per year	85	dollars per hour	
	A5H	SUBCONTRACTED SRVS		P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	8,840.00	Dollars
	Factors	2	hours per week	52	weeks per year	85	dollars per hour			

Line Item T21 - Health Physics And Instrumentation

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - A. Leased Labor cost of calibrations of instruments used by building radiation control personnel and other building personnel: Alphamets - 114 hrs, A-100 - 176 hrs, Mircorem - 90 hrs, DRDs - 46 hrs, SAC-4 - 160 hrs, Electras - 441 hrs, Hi Vol Samplers - 34 Hrs, Lo Vol Samplers - 40 hrs, Ludlum 12-1A - 224 hrs, Ludlum 12-4 - 247 hrs, Ludlum 31 - 7 hrs, Ludlum 2 - 5 hrs, PCM-2 - 1100 hrs, RO-20 - 605 hrs, SAIC AP-2 - 16 hrs, for a total of 3305 hrs B. Parts, supplies and overhead costs of calibration of instruments used by building radiation control personnel and other building personnel: Balances, O2 Analyzers, magnahelics, photohelics, pressure differentials, torque wrenches, PCM-2s, Ludlums, etc.							
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES		0000	NONE	K399S	Building 776 Project	Linear	18,000.00	Dollars
	Factors	18000 Dollars for supplies								
	A5H	SUBCONTRACTED SRVS		P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	230,934.00	Dollars
	Factors	66 dollars per hour		3499	Hours					

Line Item T22 - Radiological Management

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc -							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	3,600.00	Hours
	Factors	2	Radiological Foreman Sutton, Fields		1800	Hours each			
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	1,000.00	Hours
	Factors	1	Off-shift Supervisor		1000	hours per year			

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751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	540.00	Hours
Factors	0.15 15% Overtime		3600 hours Straight time					
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	25.000.00	Dollars
Factors	25000 Misc Supplies							

Line Item T23 - Criticality Safety Officer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc -	The Criticality Safety Officer performs the duties set forth in the Nuclear Criticality Safety Manual including serving as liaison for the criticality safety matters between organizations that have custody of fissionable material and all other organizations, coordination of requests for Critical Safety Engineer, and preparation of criticality safety limit postings. Also included is the annual assessments.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	R100S	RMRS Salaried	Linear	1,800.00	Hours
	Factors	1800 Hours/ea Pantom	1	Crit Safety Officer					

Line Item T24 - Occurrence Reporting

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc -	This activity consists of support required to maintain occurrence reporting requirements, including preparing and uploading of notifications, conducting investigations and critiques as necessary, processing 10-day update reports, preparing root cause analysis reports and process final reports for DOE approval. In addition, required reading is included in this work scope.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	900.00	Hours
	Factors	900 Hours per year	1	Occurrence Reporting Professional					

Line Item T27 - Chemical Control Officer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc -	Serves as the single point of contact for chemical management within the Building 776/777 complex, maintains the Chemical Management Plan, maintains a list of chemical storage sites, maintains the Chemical Management Data Base, tracks the quantities of chemicals in the Building 776/777 complex and conducts bi-annual wall-to-wall inventories and random inventories as needed, reviews and approves requisitions for chemicals, maintains Material Safety Data Sheets for chemicals stored in the Building 776/777 complex, works with managers, supervisors and other staff to develop and implement appropriate chemical procedures and practices and performs the monthly inspections of flammable cabinets.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1,800.00	Hours
	Factors	1	Chemical Control Officer	1800	Hours				

WBS No: 1DAB04 Title: B776 Operations Management

Activity ID: 1DB0400000 Description: FY-00 B776 Operations Management 4th Qtr

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OM04	Configuration Control Authority (CCA)	1.00	ea	HC	4.896	4.896	131.384	0	0	131.384	64.115	195.500
OM07	Environmental Technical Support	1.00	ea	HC	0	0	0	115.600	0	115.600	0	115.600
OM08	Utility Management	1.00	ea	HC	0	0	0	57.800	0	57.800	0	57.800
OM09	SOE's	1.00	ea	HC	7.910	7.910	176.398	0	0	176.398	86.082	262.481
OM10	Shift & Operations Orders	1.00	ea	HC	0	0	0	21.828	0	21.828	0	21.828
OM12	Decontamination	1.00	ea	H	410	410	11.128	0	0	11.128	5.430	16.558
OM14	Management Assessment Program	1.00	ea	H	0	0	0	45.078	0	45.078	0	45.078
OM15	Custodial	1.00	ea	HC	1.950	1.950	32.916	0	0	32.916	16.063	48.979
OM16	Laundry	1.00	ea	HC	960	960	22.903	240.000	0	262.903	11.177	274.079
OM17	Training	1.00	ea	HC	3.382	3.382	69.454	84.521	0	153.974	33.893	187.868
OM18	Price Anderson Coordination	1.00	each	HC	0	0	0	46.393	0	46.393	0	46.393

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Activity ID: 1DB0400000

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Total for Activity 1DB0400000:

19.509	444.183	611.219	0	1.055.402	216.761	1.272.163
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Line Item OM04 - Configuration Control Authority (CCA)

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Configuration Control Authorities (CCA) are the single point work release for the authorization of activities in B776/777. The CCA ensures that activities are appropriately planned, scheduled, technically reviewed and may be conducted within the applicable authorization basis. The CCA shall be cognizant of safety system status in order to release work to be conducted within the AB. The CCA shall act as the emergency incident commander in the event that an upset condition arises or an emergency response is warranted.</p> <p>Overtime required to support maintenance and emerging activities to ensure safety and operability of the facility is included in this basis of estimate.</p>					
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	4.080.00	Hours
Factors	6 CCAs	680	Hours per year					
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	816.00	Hours
Factors	4080 Hours ST	0.2	20% Overtime					

Line Item OM07 - Environmental Technical Support

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Acts as a single point of contact for all environmental compliance issues within designated buildings, reviews and approves Non Routine Waste Origination Logs, supports regulatory area inspections with CDPHE, EPA, DOE, and RFETS, and completes the appropriate pre- and post-status documents, maintains the Environmental Central File System for designated buildings, identifies corrective measures to environmental compliance related deficiencies and prepares environmental compliance action plans, maintains the Waste Stream and Residue Characterization book for the building, initiates the reactive chemical management plan ensuring the proper notification are made and that the treatment complies with the building authorization basis, documents any generator treatment performed in the building, and ensures that the building is supplied with adequate spill response equipment.</p>					
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Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	61.200.00	Dollars
Factors	2 Environmental Technologists -	680	hours per year	45	Dollars per hour RMRS Corporate			
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	54.400.00	Dollars
Factors	1 Env'l Specialist - Stoller	680	Hours per Week	80	Dollars per hour RMRS Corporate			

Line Item OM08 - Utility Management

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Utility management includes the Utilities Manager and the Utilities Foreman, as follows: The Utilities Manager oversees facility utility operations per DOE and Site Standards. Specific responsibilities include ensuring that utility systems and equipment function safely and properly; that surveillances are performed in a safe and timely manner; that applicable training and qualification standards are met by management, technical, and Stationary Operating Engineers; and that all activities are in concert with the plant, building, and programs objectives.</p> <p>The Utilities Foreman directly oversees the daily SOE activities and ensures that all required activities are conducted in a safe, timely, and proper manner, and in accordance with management guidance.</p>					
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Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	57.800.00	Dollars
Factors	85 dollars per hour	1	Utilitiv Specialist Theesfeld	680	Hours			

Line Item OM09 - SOE's

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - The Stationary Operating Engineers (SOEs) are required to be present around the clock and are on various jump shifts, 365 days per year to monitor both the control room and compressor house, and to make shiftly rounds. One SOE is required to cover the control room and one SOE is required to cover the compressor house and make shiftly rounds. Overtime is added to account for shift turnover, training, and absences due to illness, or vacations. SOEs also perform the following surveillances during their shiftly rounds: Photohelics; EGEN; Fan Operatibity; Oxygen Analyzers; and Hepa Filter</p>					
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WBS No: 1DAB04
Activity ID: 1DB0400000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1DAB
Activity Filter *

Starts In FY *

Differential Pressure.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	6.905.67	Hours
Factors	0.873	In FY-98 approximately 87.3% of this	2.5	SOEs	24	Hours per day (over 3 shifts)	365	days per year (continuous coverage)
	0.3612	82/227 Days remaining						
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	1.004.61	Hours
Factors	0.127	approximately 12.7% of the coverage	2.5	SOEs	24	Hours per day	365	days per year to provide total
	0.3612	82/227 Days remaining						

Line Item OM10 - Shift & Operations Orders

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Operations and Shift Orders Administration includes ongoing maintenance of all active building operations and shift orders by an experienced technical writer-administrator. Generally, the administrator updates existing orders in response to the building's day-to-day operating demands and in accordance with standing plant policies and procedures. In some cases, the administrator may develop an original order. In addition, the administrator processes the orders in accordance with plant and DOE standards, maintains an accurate and current working file, and maintains an up-to-date Operations Orders Manual. The administrator works in conjunction with building professional staff and management, subject matter experts, and other technical writers in order to ensure the accuracy, timeliness, and thoroughness of the operations orders.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	20.400.00	Dollars
Factors	60	dollars per hour Chartrand	340	hours				
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	1.428.00	Dollars
Factors	0.07	7% overtime	60	dollars per hour	340	hours straight time		

Line Item OM12 - Decontamination

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev0.

Item Desc -
Provide as needed decontamination support to support various operations in B776/777.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	65.02	Hours
Factors	1	Industrial Hygienist	9	Hours per day performing Be Decon	20	days per year performing Be Decon	0.3612	82/227 Days remaining
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	65.02	Hours
Factors	1	RCT	9	hours per day Be Decon	20	days performing Be decon per year	0.3612	82/227 Days remaining
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	130.03	Hours
Factors	2	Process Specialists	9	hours per day for Be Decon	20	days	0.3612	82/227 Days remaining
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	150.26	Hours
Factors	8	hours per week Pu Decon	52	weeks per year	0.3612	82/227 Days remaining		

Line Item OM14 - Management Assessment Program

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Coordination of Management Assessment Program for the 776/777 buildings. Reviews and tracks items identified through the performance of MAP's. Inputs actions into the PATS system and tracks to completion.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A53	E-2	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	45.077.76	Dollars
Factors	52	weeks per year -Scott	60	dollars per hour	40	hours per week coordinate/administer		
	0.3612	82/227 Days remaining						

Line Item OM15 - Custodial

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

WBS No: 1DAB04
Activity ID: 1DB0400000

Rockv Flats Closure Project
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Project Baseline Devl
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Activity Filter *

Starts In FY *

Item Desc - Custodial Support covers basic cleaning support including cleaning of locker rooms and restrooms, common areas, office areas, conference rooms. Tasks include floor maintenance (vacuuming, sweeping, mopping, and polishing), bathroom cleaning and stocking of supplies and materials, housekeeping, disposal of rubbish, dusting office furniture, and light outside cleaning and snow management.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	L030	UTILITY WORKER	KD10H	776 Complex Steelworkers	Linear	1.950.00 Hours
Factors	3	Utility Workers	650	Hours per year			

Line Item OM16 - Laundry

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Laundry stocking includes sorting and distributing anti-c clothing within Buildings 776/777 and the B778 change room.

This pays for modesty clothing and anti-c clothing.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	L090	GENERAL LABORER	KD10H	776 Complex Steelworkers	Linear	283.90 Hours
Factors	524	hours	1.5	50% increase in needs over FY-99	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	225.39 Hours
Factors	1	Process Specialist	8	Hours Straight Time per week	52	weeks per year	1.5 50% increase in needs over FY-99
	0.3612	82/227 Days remaining					
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	450.78 Hours
Factors	2	Process Specialists	8	Hours per week	52	weeks per year	1.5 50% increase in needs over FY-99
	0.3612	82/227 Days remaining					
A5F	CSS FIXED PRICE	0000	NONE	K260S	Site Operations	Linear	240.000.00 Dollars
Factors	60000	Dollars/Month	4	Months			

Line Item OM17 - Training

BOE
Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Training Qualification for personnel attending courses required for job performance as defined in the Qualification Performance & Training records for each building specific department and skill code.

Education Reimbursement covers formal approved off-site educational programs and/or attendance at off-site training seminars that directly benefit the employees' performance.

The Training Coordinator ensures compliance with plant training standards, advises building management regarding training requirements, and provides guidance to the Training Scheduler for implementation of plantwide training standards.

The Training Scheduler provides logistics information regarding training sessions and schedules attendance of building personnel at required training courses.

Rad Ops Training funds support time spent in class to maintain sufficient qualifications.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	869.77 Hours
Factors	86	Hours	28	RCTs	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	58.51 Hours
Factors	9	Personnel	18	Hours (RCRA)	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.087.21 Hours
Factors	35	D&D Workers	86	hours each per year general training	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	497.01 Hours
Factors	16	Personnel	86	Hours	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	497.01 Hours
Factors	16	Personnel	86	Hours	0.3612	82/227 Days remaining	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	372.76 Hours
Factors	12	Personnel	86	Hours	0.3612	82/227 Days remaining	

WBS No: 1DAB04
Activity ID: 1DB040000

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A5H	SUBCONTRACTED SRVS	P150	TRAINERS	K399S	Building 776 Project	Linear	52.012.80	Dollars
Factors	1	Subcontracted Trainer Randozzo	1800	hours	80	dollars per hour	0.3612	82/227 Days remaining
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	R100S	RMRS Salaried	Linear	32.508.00	Dollars
Factors	1	RMRS Trainer Mendoza	1800	hours	50	dollars per hour	0.3612	82/227 Days remaining

Line Item OM18 - Price Anderson Coordination

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - This activity includes support for authorization, review, and processing of Price Anderson Amendment Act (PAAA) issues. These items include reviewing Occurrence Reports, Radiological Deficiency Reports (RDR), Facility assessments, audits and surveillance reports, and adverse trends and indicators. The PAAA Coordinator investigates and documents issues/events or conditions at the facility level to the degree deemed necessary by the PA Compliance Manager and/or the RMRS General Council. This may include such activities as attending fact-finding meetings, participating in root cause investigations, interviewing facility personnel, reviewing records, participating in the development of corrective actions and generating closure documentation. In addition, this line contains the work scope for the Commitments Tracking Coordinator who is responsible for tracking all external and internal commitments for B776/777 personnel. This includes Corrective Action Requests (CAR), Deficiency Reports (DR), Environmental Commitments, JCUSC Safety Concerns, Compliance Schedule Agreements (CSA), Short-Term Compliance Statements (STCS), and all DOE commitments. Responsible for ensuring status revision requests, interim certificates of completion, and final certificates of completion are submitted to site Commitments Tracking personnel as required.											

Resources	Cost Element			Skill			Department			Curve	Quantity	Units	
	A5H	SUBCONTRACTED SRVS		P170	OTHER ADMINISTRATIVE & PROFE		K399S	Building 776 Project			Linear	24.417.12	Dollars
	Factors	20	Hours per week coordinating Price	52	weeks per year		0.3612	82/227 Days remaining			65	dollars per hour	
	A5H	SUBCONTRACTED SRVS		P170	OTHER ADMINISTRATIVE & PROFE		K399S	Building 776 Project			Linear	21.975.41	Dollars
	Factors	18	hours per week for commitments	52	weeks per year		0.3612	82/227 Days remaining			65	dollars per hour	

Activity ID: 1DB0400001 Description: FY-00 Personnel Relo & Property Disposition

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
776-1CPA	Computer/Comm. Equipment Disposition	0.00	P1CPA	HC	#Num!	0	0	0	0	0	0	0
776-1FPA	Office Furniture Disposition	0.00	P1FPA	HC	#Num!	0	0	0	0	0	0	0
776-PersonnelRel	Personnel Relocation	20.00	each	HC	0	0	0	3.123	0	3.123	0	3.123
Total for Activity 1DB0400001:						0	0	3.123	0	3.123	0	3.123

Line Item 776-1CPA - Computer/Comm. Equipment Disposition

BOE

Resource unit values are from Disposal Cost Model.
Line Item quantity for FY-01 is planned to be insignificant. This line item is being included in the work plan for future modification if necessary.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	K399S	Building 776 Project	Linear	0.07	Hours
Factors	0.2	Hazard Assessment		0.3612	82/227 Days remaining			
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	KD10H	776 Complex Steelworkers	Linear	0.07	Hours
Factors	0.2	Readiness/Removal		0.3612	82/227 Days remaining			
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	KD10H	776 Complex Steelworkers	Linear	0.04	Hours
Factors	0.1	Material Handling		0.3612	82/227 Days remaining			
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C270S	Property Management	Linear	0.04	Hours
Factors	0.1	Administrative		0.3612	82/227 Days remaining			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	0.07	Hours
Factors	0.2	Transportation		0.3612	82/227 Days remaining			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C270S	Property Management	Linear	0.09	Hours
Factors	0.25	Administrative		0.3612	82/227 Days remaining			

Line Item 776-1FPA - Office Furniture Disposition

BOE	Resource unit values are from Disposal Cost Model. Line Item quantity for FY-01 is planned to be insignificant. This line item is being included in the work plan for future modification if necessary.									
Resources	<i>Cost Element</i>			<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	750	STRAIGHT TIME BASE		L050	MISSION SUP SPEC I (CBLFAB.DSP.		KD10H	776 Complex Steelworkers	Linear	0.11
	<i>Factors</i>	0.3	Readiness/Removal		0.3612 82/227 Davs remaining					
	750	STRAIGHT TIME BASE		L070	MISSION SUP SPEC III		KD10H	776 Complex Steelworkers	Linear	0.04
	<i>Factors</i>	0.1	Material Handling		0.3612 82/227 Davs remaining					

WBS No: 1DAB04
Activity ID: 1DB0400001

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750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C270S	Property Management	Linear	0.04	Hours
Factors	0.1	Administrative	0.3612	82/227 Days remaining				
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	0.07	Hours
Factors	0.2	Transportation	0.3612	82/227 Days remaining				
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C270S	Property Management	Linear	0.09	Hours
Factors	0.25	Administrative	0.3612	82/227 Days remaining				

Line Item 776-PersonnelRelo - Personnel Relocation

BOE

Historical Data Source - Personnel Relocation Planning Template (3/12/99) and associated guidance on average cost for relocation.
Item Desc - Relocate Personnel Supporting B776/777 Closure
Breakdown of Historical Data:
Item - Personnel Relocation
Units - ea
Unit Cost - 432.35
Unit Cost Adjustment factor - None
Revised Unit Cost - 432.35
Basis for adjustment -

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	0000 NONE	K399S Building 776 Project	Linear	156.16	Dollars
Factors	432.35	Dollars per employee relocation	0.3612	82/227 Days remaining	

Activity ID: 1DB0440000 Description: FY-04 B776 Facility Landlord

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OM04	Configuration Control Authority (CCA)	0.33	ea	HC	12.960	4.277	114.768	0	0	114.768	32.365	147.132
OM07	Environmental Technical Support	0.33	ea	HC	0	0	0	149.952	0	149.952	0	149.952
OM08	Utility Management	0.33	ea	HC	0	0	0	50.490	0	50.490	0	50.490
OM09	SOE's	0.33	ea	HC	28.225	9.314	214.674	0	0	214.674	60.538	275.212
OM10	Shift & Operations Orders	0.33	ea	HC	0	0	0	38.135	0	38.135	0	38.135
OM12	Decontamination	0.33	ea	H	870	287	7.296	0	0	7.296	2.058	9.354
OM14	Management Assessment Program	0.33	ea	H	0	0	0	41.184	0	41.184	0	41.184
OM15	Custodial	0.33	ea	HC	5.400	1.782	30.080	0	0	30.080	8.483	38.563
OM16	Laundry	1.00	ea	HC	2.658	2.658	63.408	720.000	0	783.408	17.881	801.289
OM17	Training	0.33	ea	HC	6.136	2.025	46.826	11.550	0	58.376	13.205	71.580
OM18	Price Anderson Coordination	1.00	each	HC	0	0	0	138.320	0	138.320	0	138.320
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	628.385	628.385	0	628.385
T02	Radiological Engineering	1.00	ea	HC	0	0	0	306.000	0	306.000	0	306.000
T03	Stepoff Pad	1.00	ea	H	2.574	2.574	56.326	0	0	56.326	15.884	72.210
T04	Contamination Control	1.00	ea	H	515	515	11.265	0	0	11.265	3.177	14.442
T05	Radiological Work Permit	0.33	ea	H	2.317	764	16.729	0	0	16.729	4.718	21.446
T06	ALARA Committee	1.00	ea	HC	60	60	1.231	0	0	1.231	347	1.578
T07	Analytical Lab - DAC	9.600.00	each	H	0	0	0	211.200	0	211.200	0	211.200
T08	Nuclear Safety Support	1.00	each	HC	0	0	0	306.000	0	306.000	0	306.000
T10	Electrical Engineering	1.00	ea	H	0	0	0	263.740	0	263.740	0	263.740
T11	Mechanical Engineering	1.00	ea	HC	0	0	0	279.000	0	279.000	0	279.000
T13	Fire Protection Engineering	1.00	ea	HC	0	0	0	153.000	0	153.000	0	153.000
T14	Emergency Preparedness	1.00	ea	HC	144	144	2.960	85.500	0	88.460	835	89.295
T15	Procedures	0.33	ea	HC	0	0	0	38.610	0	38.610	0	38.610
T16	Criticality Engineering	0.33	ea	HC	0	0	0	126.225	0	126.225	0	126.225
T17	Plan of the Week/DOD	1.00	ea	HC	936	936	24.551	0	0	24.551	6.923	31.475
T19	Project Safety Officer	1.00	each	HC	0	0	0	153.000	0	153.000	0	153.000
T20	Plant Review Committee	0.33	each	HC	104	34	900	5.834	0	6.735	254	6.988
T21	Health Physics And Instrumentation	0.33	ea	H	0	0	0	82.148	0	82.148	0	82.148
T22	Radiological Management	1.00	each	HC	5.140	5.140	145.641	25.000	0	170.641	41.071	211.712
T23	Criticality Safety Officer	1.00	ea	HC	0	0	0	153.000	0	153.000	0	153.000
T24	Occurrence Reporting	1.00	each	HC	0	0	0	76.500	0	76.500	0	76.500

WBS No: 1DAB04
Activity ID: 1DB0440000

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T27	Chemical Control Officer	0.33	ea	HC	0	0	0	50.490	0	50.490	0	50.490
Total for Activity 1DB0440000:						30.511	736.656	3,464.878	628.385	4,829.920	207.737	5,037.657

Line Item OM04 - Configuration Control Authority (CCA)

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Configuration Control Authorities (CCA) are the single point work release for the authorization of activities in B776/777. The CCA ensures that activities are appropriately planned, scheduled, technically reviewed and may be conducted within the applicable authorization basis. The CCA shall be cognizant of safety system status in order to release work to be conducted within the AB. The CCA shall act as the emergency incident commander in the event that an upset condition arises or an emergency response is warranted.</p> <p>Overtime required to support maintenance and emerging activities to ensure safety and operability of the facility is included in this basis of estimate.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	10.800.00	Hours
Factors	6 CCAs	1800	Hours per year					
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	2.160.00	Hours
Factors	10800 Hours ST	0.2	20% Overtime					

Line Item OM07 - Environmental Technical Support

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Acts as a single point of contact for all environmental compliance issues within designated buildings, reviews and approves Non Routine Waste Origination Logs, supports regulatory area inspections with CDPHE, EPA, DOE, and RFETS, and completes the appropriate pre- and post-status documents, maintains the Environmental Central File System for designated buildings, identifies corrective measures to environmental compliance related deficiencies and prepares environmental compliance action plans, maintains the Waste Stream and Residue Characterization book for the building, initiates the reactive chemical management plan ensuring the proper notification are made and that the treatment complies with the building authorization basis, documents any generator treatment performed in the building, and ensures that the building is supplied with adequate spill response equipment.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E050	ENVIRONMENTAL ENGINEERS	K399S	Building 776 Project	Linear	288.000.00	Dollars
Factors	2 Environmental Technologists	1800	hours per year	80	Dollars per hour RMRS Corporate			
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	166.400.00	Dollars
Factors	1 Administrative Support Personnel	40	Hours per Week	52	Weeks per year	80	Dollars per hour RMRS Corporate	

Line Item OM08 - Utility Management

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Utility management includes the Utilities Manager and the Utilities Foreman, as follows: The Utilities Manager oversees facility utility operations per DOE and Site Standards. Specific responsibilities include ensuring that utility systems and equipment function safely and properly; that surveillances are performed in a safe and timely manner; that applicable training and qualification standards are met by management, technical, and Stationary Operating Engineers; and that all activities are in concert with the plant, building , and programs objectives.</p> <p>The Utilities Foreman directly oversees the daily SOE activities and ensures that all required activities are conducted in a safe, timely, and proper manner, and in accordance with management guidance.</p> <p>Also included in this element are resources to cover the LO/TO requirements.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	153.000.00	Dollars
Factors	85 dollars per hour	1	Utilitiv Specialist	1800	Hours/ea			

Line Item OM09 - SOE's

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p>											
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Item Desc - The Stationary Operating Engineers (SOEs) are required to be present around the clock and are on various jump shifts, 365 days per year to monitor both the control room and compressor house, and to make shiftly rounds. One SOE is required to cover the control room and one SOE is required to cover the compressor house and make shiftly rounds. Overtime is added to account for shift turnover, training, and absences due to illness, or vacations. SOEs also perform the following surveillances during their shiftly rounds: Photohelics; EGEN; Fan Operatibity; Oxygen Analyzers; and Hepa Filter Differential Pressure.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	22.942.44Hours
Factors	0.873	In FY-98 approximately 87.3% of this	3 SOEs	24	Hours per day (over 3 shifts)	365	days per year (continuous coverage)
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	3.285.00Hours
Factors	1	hours shift overlap (0.5 hrs per SOE	3 shifts	3	SOEs	365	per year
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	1.997.28Hours
Factors	0.076	approximately 7.6% of the coverage	3 SOEs	24	Hours per day	365	days per year to provide total

Line Item OM10 - Shift & Operations Orders

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Operations and Shift Orders Administration includes ongoing maintenance of all active building operations and shift orders by an experienced technical writer-administrator. Generally, the administrator updates existing orders in response to the building's day-to-day operating demands and in accordance with standing plant policies and procedures. In some cases, the administrator may develop an original order. In addition, the administrator processes the orders in accordance with plant and DOE standards, maintains an accurate and current working file, and maintains an up-to-date Operations Orders Manual. The administrator works in conjunction with building professional staff and management, subject matter experts, and other technical writers in order to ensure the accuracy, timeliness, and thoroughness of the operations orders.									

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	108.000.00Dollars
Factors	60	dollars per hour	1800	hours			
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	7.560.00Dollars
Factors	0.07	7% overtime	60	dollars per hour	1800	hours straight time	

Line Item OM12 - Decontamination

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev0.									
	Item Desc - Provide as needed decontamination support to support various operations in B776/777.									

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	K399S	Building 776 Project	Linear	180.00Hours
Factors	1	Industrial Hygienist	9	Hours per day performing Be Decon	20	days per year performing Be Decon	
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	180.00Hours
Factors	1	RCT	9	hours per day Be Decon	20	days performing Be decon per year	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	360.00Hours
Factors	2	Process Specialists	9	hours per day for Be Decon	20	days	
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	150.26Hours
Factors	8	hours per week Pu Decon	52	weeks per year	0.3612	82/227 Days remaining	

Line Item OM14 - Management Assessment Program

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Desc - Coordination of Management Assessment Program for the 776/777 buildings. Reviews and tracks items identified through the performance of MAP's. Inputs actions into the PATS system and tracks to completion.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A53	E-2	G010	ADMINISTRATIVE ASSISTANTS	K399S	Building 776 Project	Linear	124.800.00Dollars
Factors	52	weeks per year	60	dollars per hour	40	hours per week coordinate/administer	

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Line Item OM15 - Custodial

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Custodial Support covers basic cleaning support including cleaning of locker rooms and restrooms, common areas, office areas, conference rooms. Tasks include floor maintenance (vacuuming, sweeping, mopping, and polishing), bathroom cleaning and stocking of supplies and materials, housekeeping, disposal of rubbish, dusting office furniture, and light outside cleaning and snow management.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	L030	UTILITY WORKER	KD10H	776 Complex Steelworkers	Linear	5,400.00 Hours
Factors	3	Utility Workers	1800	Hours per year			

Line Item OM16 - Laundry

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Laundry stocking includes sorting and distributing anti-c clothing within Buildings 776/777 and the B778 change room.

This pays for modesty clothing and anti-c clothing.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	L090	GENERAL LABORER	KD10H	776 Complex Steelworkers	Linear	786.00 Hours
Factors	524	hours	1.5	50% increase in needs over FY-99			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	624.00 Hours
Factors	1	Process Specialist	8	Hours Straight Time per week	52	weeks per year	1.5 50% increase in needs over FY-99
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1,248.00 Hours
Factors	2	Process Specialists	8	Hours per week	52	weeks per year	1.5 50% increase in needs over FY-99
A5F	CSS FIXED PRICE	0000	NONE	K260S	Site Operations	Linear	720,000.00 Dollars
Factors	60000	Dollars/Month	12	Months			

Line Item OM17 - Training

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Training Qualification for personnel attending courses required for job performance as defined in the Qualification Performance & Training records for each building specific department and skill code.

Education Reimbursement covers formal approved off-site educational programs and/or attendance at off-site training seminars that directly benefit the employees' performance.

The Training Coordinator ensures compliance with plant training standards, advises building management regarding training requirements, and provides guidance to the Training Scheduler for implementation of plantwide training standards.

The Training Scheduler provides logistics information regarding training sessions and schedules attendance of building personnel at required training courses.

Rad Ops Training funds support time spent in class to maintain sufficient qualifications.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	172.00 Hours
Factors	2	Personnel	86	Hours			
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	1,656.00 Hours
Factors	18	Hours/quarterly module	23	RCTs	4	quarters	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2,838.00 Hours
Factors	33	D&D Workers	86	hours each per year general training			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	180.00 Hours
Factors	10	Personnel	18	Hours (RCRA)			
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1,290.00 Hours
Factors	15	D&D Workers	86	hours each per year general training			

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A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K399S	Building 776 Project	Linear	35.000.00	Dollars
Factors	3500	\$/s per Education Reimbursement	10	Personnel				

Line Item OM18 - Price Anderson Coordination

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - This activity includes support for authorization, review, and processing of Price Anderson Amendment Act (PAAA) issues. These items include reviewing Occurrence Reports, Radiological Deficiency Reports (RDR), Facility assessments, audits and surveillance reports, and adverse trends and indicators. The PAAA Coordinator investigates and documents issues/events or conditions at the facility level to the degree deemed necessary by the PA Compliance Manager and/or the RMRS General Council. This may include such activities as attending fact-finding meetings, participating in root cause investigations, interviewing facility personnel, reviewing records, participating in the development of corrective actions and generating closure documentation. In addition, this line contains the work scope for the Commitments Tracking Coordinator who is responsible for tracking all external and internal commitments for B776/777 personnel. This includes Corrective Action Requests (CAR), Deficiency Reports (DR), Environmental Commitments, JCUSC Safety Concerns, Compliance Schedule Agreements (CSA), Short-Term Compliance Statements (STCS), and all DOE commitments. Responsible for ensuring status revision requests, interim certificates of completion, and final certificates of completion are submitted to site Commitments Tracking personnel as required.							

Resources	Cost Element			Skill			Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS		P170	OTHER ADMINISTRATIVE & PROFE		K399S	Building 776 Project	Linear	72,800.00	Dollars
	Factors	20	Hours per week coordinating	Price	52	weeks per year		70	dollars per hour		
	A5H	SUBCONTRACTED SRVS		P170	OTHER ADMINISTRATIVE & PROFE		K399S	Building 776 Project	Linear	65,520.00	Dollars
	Factors	18	hours per week for commitments		52	weeks per year		70	dollars per hour		

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	205.023.10	Dollars
	Factors 205023 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	423.361.80	Dollars
	Factors 423362 Dollars									

Line Item T02 - Radiological Engineering

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Provides support services for ALARA, IWCPs, Building Assessments, Operation Orders, Technical Bases Documents, Radiological Deficiency Reports, Radiological Work Permits, Device/Source Audit Deliverables, ALARA job reviews and property/waste release evaluation database maintenance and Radiation Protection Program maintenance.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K399S	Building 776 Project	Linear	306.000.00	Dollars
Factors	2	Radiological Safety Engineer		1800	hours per year	85	per hour	

Line Item T03 - Steppoff Pad

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity encompasses the radiological monitoring of equipment exiting the Radiological Controlled Areas. The proper release documentation of material and equipment leaving the radiological controlled areas is the responsibility of the set-off pad RCT. The step-off pad RCT responds to any contamination monitor alarm from personnel self-monitoring or personnel requesting help for self-monitoring. Equipment and personnel monitoring are required by the Site Radiological Control Manual and DOE Order 5400.5 to ensure the safety of the workers, the public and the environment. The step-off pad RCT also performance tests the instruments used at the step-off pad on a daily basis.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	2.340.00	Hours
Factors	1 RCT	9	hrs per day	52	weeks	5	days per week	
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	234.00	Hours
Factors	2340 Total ST hours	0.1	10% Over-Time	1	RCT			

Line Item T04 - Contamination Control

BOE								
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Item Desc - Identification of contamination sources to prevent the spreading of contamination in controlled areas and individual exposures. Detect contamination in cold areas; provide technical information on amount of contamination and degree of risk an corrective actions. Respond to SAAM alarms on off normal conditions, and respond to loss of contamination control issues, i.e., Radiological contamination of gloves, booties, and personnel. Perform pre-job surveys on misc. minor tasks to ensure the Radiological Work Permits are adequate to control the work performed. Also, decontamination/contamination area rollback will be performed to increase work efficiency, reduce laundry costs, and minimize the generation of of radioactive waste. The process will include walls and floors, as well as all materials and equipment in the area to be downgraded, to be surveyed and/or decontaminated. A representative sample of rooms slated for decontamination is as follows: Rooms: 134E; 430; 463; 452; 131; 134; and 154A.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	468.00	Hours
Factors 2 Hours/dav		234 working AWS days						
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	46.80	Hours
Factors 0.1 10% Overtime		468 Straight Time Hours						

Line Item T05 - Radiological Work Permit

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Writing and distribution of Radiological Work Permits which define the safe radiological working parameters. Includes maintenance of a filing system to control the number of RWP's released and tracks returns to the RWP office through a daily log. Archiving of expired Radiological Work Permits and their supporting documentation is also performed. Issues and tracks return of Electronic Pocket Dosimeters (EPD). Records and tracks individual doses from EPDs. Files and archives all radiological surveys.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	2,106.00	Hours
Factors 1 RCT		9 Hours per dav		234 Working AWS days				
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	210.60	Hours
Factors 0.1 10% Overtime		2106 Straight Time Hours						

Line Item T06 - ALARA Committee

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Addresses radiological safety concerns and issues that have been identified by the building, programs, or an activity that was conducted. The Chairperson shall be the Operations/Facility Manager, or designee, and the committee shall consist of representatives from departments that support the area. Performs evaluations to determine whether activities are being conducted in accordance with the ALARA Program and implementing procedures. Formulates and coordinates the implementation of the Project Area ALARA goals. Meets monthly on any actions taken to resolve radiological issues, noteworthy ALARA accomplishments, ALARA concerns, etc.. Generates a status report of items discussed and/or acted upon. Includes walk-downs, meetings, reporting, etc..

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
Factors 1 hour per monthlv meeting		1 RCT		12 months				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00	Hours
Factors 1 hour per monthlv meeting		2 Pipefitters		12 Months				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00	Hours
Factors 1 hours per monthly meeting		2 Process Specialists		12 months				

Line Item T07 - Analytical Lab - DAC

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Lab Support includes Offsite Commercial Support, Hot/Mixed Lab Support, Sample Team Support, and Mobile Lab Support . These activities are described below:

DAC Analytical Support - Gross Alpha analysis for the following items:
1) Gross Alpha (OS01-02)

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- 2) Radiological Screening (OS03-04)
- 3) Gross Alpha/Beta (OS05-17)
- 4) Gross Alpha/Beta - Air Filters (OS18-20)
- 5) Air Filter Loading, Unloading, and Compositing (OS-21)

The type and quantity of the analysis performed is dependent on project customer needs as well as the laboratory capability and capacity.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analvtical Laboratory Services	Linear	22.00	Dollars

Factors 22 dollars per DAC Sample

Line Item T08 - Nuclear Safety Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - This function is performed by Nuclear Safety Engineering which provides nuclear technical support, facility safety analysis, Unreviewed Safety Question Determination (USQD) of activities and documents submitted for review, participation in the Operational Review Committee (ORC) process to clarify and advise members on issues concerning USQDs, Safety Evaluation Screens (SESS), and Operational Safety Requirements/Technical Safety Requirements (OSR/TSR) page changes and guidance. Historically, three engineers have been required to perform this scope.								
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	306.000.00	Dollars

Factors 2 Nuclear Safety Engineer 85 dollars per hour 1800 hours per year each

Line Item T10 - Electrical Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Electrical Engineering serves as Subject Matter Expert on all electrical power related equipment and systems, supports IWCP, performs engineering operability evaluations on an as-needed basis; supports authorization basis activities, and serves as liaison/Point of Contact with RMRS Central Engineering on building engineering matters. Additionally, This position will provide engineering support for procedure development, system walkdown and one line drawing development, labeling of key components and development of system descriptions.								
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	81,600.00	Dollars
	Factors	1	Electrical Engineer	12	packages per year	80	hours per design modification	85	dollars per hour
	A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	35,700.00	Dollars
	Factors	1	Electrical engineers	12	EOEs per year	35	hours per Engineering Operability	85	dollars per hour
	A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	53,040.00	Dollars
	Factors	2	LO/TOs per week	6	hours support for Lockout/Tagout	52	Weeks per year	85	dollars per hour
	A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	51,000.00	Dollars
	Factors	1	Electrical Engineer	15	ESPs per year	40	hours per Engineering Support	85	dollars per hour
	A57	LATA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	28,000.00	Dollars
	Factors	70	dollars per hour	10	hours support to Standard Work	40	SWPs requiring EE support		
	A57	LATA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	14,400.00	Dollars

Line Item T11 - Mechanical Engineering

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Mechanical Engineering serves as a subject matter expert on all mechanical equipment related systems. Additionally, this discipline will provide engineering support for procedure development, system walkdowns, and one line drawing development, labeling of key components, and development of system descriptions.								
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	A52	TENERA		E070	MECHANICAL ENGINEERS	K399S	Building 776 Project	Linear	153.000.00	Dollars
	Factors	1	Mechanical Engineer	1800	Hours per year	85	dollars per hour			
	A57	LATA		E070	MECHANICAL ENGINEERS	K399S	Building 776 Project	Linear	126.000.00	Dollars
	Factors	70	dollars per hour	1	Mechanical Engineers	1800	hours each per year			

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Line Item T13 - Fire Protection Engineering

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
		Item Desc - Fire Protection Engineering provides technical support and fire hazards analysis for the building.					
Resources		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A52	TENERA	E130	OTHER ENGINEERS	K252S	Engineering	Linear	153.000.00Dollars
<i>Factors</i>	85	dollars per hour	1800	hours			

Line Item T14 - Emergency Preparedness

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
		Item Desc - Administers the implementation of the RFETS Emergency Preparedness Program for the protection of personnel, the public, and the environment during emergency response. Develops and implements of the Building Emergency Program, provides technical assistance to building management for development and conduct of building drills, provides procedure review and approval and trains the Building Emergency Preparedness Personnel on new procedures and development processes.					
		A. Develop/conduct building emergency drills.					
		B./C./D. Drill controller/evaluator.					
Resources		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	48.00Hours
<i>Factors</i>	2	RCT	2	hours per drill	12	Drills per year	
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	96.00Hours
<i>Factors</i>	4	Process Specialist	2	hours per drill	12	Drills per year	
A52	TENERA	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	85.500.00Dollars
<i>Factors</i>	95	\$'s/Hour	1800	Hours	0.5	Bepa Consultant	

Line Item T15 - Procedures

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
		Item Desc - The Procedure Administration function includes development, updates, modifications and issuance of procedures to operate the facility.					
Resources		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	117.000.00Dollars
<i>Factors</i>	1	Procedure Writer	65	dollars per hour	1800	hours each per year	

Line Item T16 - Criticality Engineering

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
		Item Desc - The Criticality Engineer provides the building with criticality safety analysis that is in conformance to applicable standards, rules, and orders to provide guidance in the form of limits and procedures which ensure the subcriticality of the building's fissile material handling, processing, and storage operations. Two Criticality Engineers are required plus 0.5 for the Lead Criticality Engineer.					
Resources		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	382.500.00Dollars
<i>Factors</i>	125	dollars per hour	1800	hours each per year	1.7	Criticality Safety Engineers	

Line Item T17 - Plan of the Week/DOD

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
		Item Desc - The Plan of the Week (POW) is a meeting held each week to plan all work activities for the coming week, discuss the current Facility condition, radiological concerns, to update the activity schedule, set priorities, and allocate resources. The Plan of the Week coordinator is funded in this activity.					

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	936.00	Hours
	Factors	18	Hours per week	52	Weeks per year				

Line Item T19 - Project Safety Officer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - A. Perform required Health and Safety activities. Identify hazards and potential accident producing situations within the work place. Review work packages, engineering work orders and equipment installation or maintenance for safety systems and interlock functions. Promote and maintain awareness through employee participation, enforcement of safety rules, accident tracking, and trending and corrective actions. B. ASME registration and training required to perform required Health and Safety activities above.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	K399S	Buildina 776 Project	Linear	153.000.00	Dollars
	Factors	1	Industrial Hygienist	1800	Hours per year	85	dollars per hour		

Line Item T20 - Plant Review Committee

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Plant Review Committee is a new requirement being planned for in FY-99.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	104.00	Hours
	Factors	2	hours per week	52	weeks per year				
	A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	8.840.00	Dollars
	Factors	1	Nuclear Safety Professional	2	hours per week	52	Weeks per year	85	dollars per hour
	A5H	SUBCONTRACTED SRVS	E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Project	Linear	8.840.00	Dollars
	Factors	1	QA Professional	2	Hours per week	52	weeks per year	85	dollars per hour

Line Item T21 - Health Physics And Instrumentation

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - A. Leased Labor cost of calibrations of instruments used by building radiation control personnel and other building personnel: Alphamets - 114 hrs, A-100 - 176 hrs, Mircorem - 90 hrs, DRDs - 46 hrs, SAC-4 - 160 hrs, Electras - 441 hrs, Hi Vol Samplers - 34 Hrs, Lo Vol Samplers - 40 hrs, Ludlum 12-1A - 224 hrs, Ludlum 12-4 - 247 hrs, Ludlum 31 - 7 hrs, Ludlum 2 - 5 hrs, PCM-2 - 1100 hrs, RO-20 - 605 hrs, SAIC AP-2 - 16 hrs, for a total of 3305 hrs B. Parts, supplies and overhead costs of calibration of instruments used by building radiation control personnel and other building personnel: Balances, O2 Analyzers, magnahelics, photohelics, pressure differentials, torque wrenches, PCM-2s, Ludlums, etc.							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	18,000.00	Dollars
	Factors	18000	Dollars for supplies						
	A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	230,934.00	Dollars
	Factors	66	dollars per hour	3499	Hours				

Line Item T22 - Radiological Management

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc -							
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Resources											
	Cost Element			Skill		Department		Curve	Quantity	Units	
	750	STRAIGHT TIME BASE		M010	FOREMEN / TEAM LEADS / GROUP		R100S	RMRS Salaried	Linear	3.600.00	Hours
Factors	2	Radiological Foreman		1800	Hours each						

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750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	1,000.00	Hours
Factors	1	Off-shift Supervisor	1000	hours per year				
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	540.00	Hours
Factors	0.15	15% Overtime	3600	hours Straight time				
A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project	Linear	25,000.00	Dollars
Factors	25000	Misc Supplies						

Line Item T23 - Criticality Safety Officer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc -	The Criticality Safety Officer performs the duties set forth in the Nuclear Criticality Safety Manual including serving as liaison for the criticality safety matters between organizations that have custody of fissionable material and all other organizations, coordination of requests for Critical Safety Engineer, and preparation of criticality safety limit postings. Also included is the annual assessments.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	153,000.00	Dollars
	Factors	1800	Hours/ea	85	dollars per hour				

Line Item T24 - Occurrence Reporting

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc -	This activity consists of support required to maintain occurrence reporting requirements, including preparing and uploading of notifications, conducting investigations and critiques as necessary, processing 10-day update reports, preparing root cause analysis reports and process final reports for DOE approval. In addition, required reading is included in this work scope.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	76,500.00	Dollars
	Factors	900	Hours per year	1	Occurrence Reporting Professional	85	dollars per hour		

Line Item T27 - Chemical Control Officer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
Item Desc -	Serves as the single point of contact for chemical management within the Building 776/777 complex, maintains the Chemical Management Plan, maintains a list of chemical storage sites, maintains the Chemical Management Data Base, tracks the quantities of chemicals in the Building 776/777 complex and conducts bi-annual wall-to-wall inventories and random inventories as needed, reviews and approves requisitions for chemicals, maintains Material Safety Data Sheets for chemicals stored in the Building 776/777 complex, works with managers, supervisors and other staff to develop and implement appropriate chemical procedures and practices and performs the monthly inspections of flammable cabinets.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	153,000.00	Dollars
	Factors	1	Chemical Control Officer	1800	Hours	85	dollars per hour		

Activity ID: 1DF0401M00 Description: FY-01 B776 Operations Management

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OM04	Configuration Control Authority (CCA)	1.00	ea	HC	12.960	12.960	347.782	0	0	347.782	165.892	513.673
OM07	Environmental Technical Support	1.00	ea	HC	0	0	0	454.400	0	454.400	0	454.400
OM08	Utility Management	1.00	ea	HC	0	0	0	153.000	0	153.000	0	153.000
OM09	SOE's	1.00	ea	HC	20.148	20.148	449.298	0	0	449.298	214.315	663.613
OM10	Shift & Operations Orders	1.00	ea	HC	0	0	0	61.560	0	61.560	0	61.560
OM12	Decontamination	1.00	ea	H	1.136	1.136	30.807	0	0	30.807	14.695	45.503
OM14	Management Assessment Program	1.00	ea	H	0	0	0	124.800	0	124.800	0	124.800
OM15	Custodial	1.00	ea	HC	5.400	5.400	91.152	0	0	91.152	43.480	134.631
OM16	Laundrv	1.00	ea	HC	2.658	2.658	63.408	1,062.000	0	1,125.408	30.245	1,155.653
OM17	Training	1.00	ea	HC	14.496	14.496	451.477	304.000	0	755.477	215.354	970.831

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OM18	Price Anderson Coordination	1.00	each	HC	0	0	0	128.440	0	128.440	0	128.440
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	233.084	233.084	0	233.084
Total for Activity 1DF0401M00:						56.798	1.433.924	2.288.200	233.084	3.955.207	683.982	4.639.189

Line Item OM04 - Configuration Control Authority (CCA)

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Configuration Control Authorities (CCA) are the single point work release for the authorization of activities in B776/777. The CCA ensures that activities are appropriately planned, scheduled, technically reviewed and may be conducted within the applicable authorization basis. The CCA shall be cognizant of safety system status in order to release work to be conducted within the AB. The CCA shall act as the emergency incident commander in the event that an upset condition arises or an emergency response is warranted.</p> <p>Overtime required to support maintenance and emerging activities to ensure safety and operability of the facility is included in this basis of estimate.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	10.800.00	Hours
Factors	6 CCAs	1800	Hours per year					
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	2.160.00	Hours
Factors	10800 Hours ST	0.2	20% Overtime					

Line Item OM07 - Environmental Technical Support

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Acts as a single point of contact for all environmental compliance issues within designated buildings, reviews and approves Non Routine Waste Origination Logs, supports regulatory area inspections with CDPHE, EPA, DOE, and RFETS, and completes the appropriate pre- and post-status documents, maintains the Environmental Central File System for designated buildings, identifies corrective measures to environmental compliance related deficiencies and prepares environmental compliance action plans, maintains the Waste Stream and Residue Characterization book for the building, initiates the reactive chemical management plan ensuring the proper notification are made and that the treatment complies with the building authorization basis, documents any generator treatment performed in the building, and ensures that the building is supplied with adequate spill response equipment.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E050	ENVIRONMENTAL ENGINEERS	K399S	Building 776 Project	Linear	288.000.00	Dollars
Factors	2 Environmental Technologists -	1800	hours per year	80	Dollars per hour RMRS Corporate			
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	166.400.00	Dollars
Factors	1 Administrative Support Personnel	40	Hours per Week	52	Weeks per year	80	Dollars per hour RMRS Corporate	

Line Item OM08 - Utility Management

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Utility management includes the Utilities Manager and the Utilities Foreman, as follows: The Utilities Manager oversees facility utility operations per DOE and Site Standards. Specific responsibilities include ensuring that utility systems and equipment function safely and properly; that surveillances are performed in a safe and timely manner; that applicable training and qualification standards are met by management, technical, and Stationary Operating Engineers; and that all activities are in concert with the plant, building , and programs objectives.</p> <p>The Utilities Foreman directly oversees the daily SOE activities and ensures that all required activities are conducted in a safe, timely, and proper manner, and in accordance with management guidance.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	153.000.00	Dollars
Factors	85 dollars per hour	1	Utilitiv Specialist Theesfeld	1800	Hours/ea			

Line Item OM09 - SOE's

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - The Stationary Operating Engineers (SOEs) are required to be present around the clock and are on various jump shifts, 365 days per year to</p>											
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monitor both the control room and compressor house, and to make shiftly rounds. One SOE is required to cover the control room and one SOE is required to cover the compressor house and make shiftly rounds. Overtime is added to account for shift turnover, training, and absences due to illness, or vacations. SOEs also perform the following surveillances during their shiftly rounds: Photohelics; EGEN; Fan Operatibity; Oxygen Analyzers; and Hepa Filter Differential Pressure.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KD10H 776 Complex Steelworkers	Linear	17.589.21	Hours
Factors	0.873	In FY-98 approximately 87.3% of this	2.3 SOEs	24 Hours per day (over 3 shifts)	365 days per year (continuous coverage)		
	751	OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KD10H 776 Complex Steelworkers	Linear	2.558.80	Hours
Factors	0.127	approximately 12.7% of the coverage	2.3 SOEs	24 Hours per day	365 days per year to provide total		

Line Item OM10 - Shift & Operations Orders

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Operations and Shift Orders Administration includes ongoing maintenance of all active building operations and shift orders by an experienced technical writer-administrator. Generally, the administrator updates existing orders in response to the building's day-to-day operating demands and in accordance with standing plant policies and procedures. In some cases, the administrator may develop an original order. In addition, the administrator processes the orders in accordance with plant and DOE standards, maintains an accurate and current working file, and maintains an up-to-date Operations Orders Manual. The administrator works in conjunction with building professional staff and management, subject matter experts, and other technical writers in order to ensure the accuracy, timeliness, and thoroughness of the operations orders.						
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	A57	LATA	P160 TECHNICAL WRITERS AND EDITOR	K399S Building 776 Project	Linear	54.000.00	Dollars
Factors	60	dollars per hour Chartrand	900 hours				
	A57	LATA	P160 TECHNICAL WRITERS AND EDITOR	K399S Building 776 Project	Linear	7.560.00	Dollars
Factors	0.07	7% overtime	60 dollars per hour	1800 hours straight time			

Line Item OM12 - Decontamination

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev0.						
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	R100S RMRS Salaried	Linear	180.00	Hours
Factors	1	Industrial Hygienist	9 Hours per day performing Be Decon	20 days per year performing Be Decon			
	750	STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	180.00	Hours
Factors	1	RCT	9 hours per day Be Decon	20 days performing Be decon per year			
	750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	360.00	Hours
Factors	2	Process Specialists	9 hours per day for Be Decon	20 days			
	751	OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	416.00	Hours
Factors	8	hours per week Pu Decon	52 weeks per year				

Line Item OM14 - Management Assessment Program

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Coordination of Management Assessment Program for the 776/777 buildings. Reviews and tracks items identified through the performance of MAP's. Inputs actions into the PATS system and tracks to completion.						
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	A53	E-2	P170 OTHER ADMINISTRATIVE & PROFE	K399S Building 776 Project	Linear	124.800.00	Dollars
Factors	52	weeks per year Scott	60 dollars per hour	40 hours per week coordinate/administer			

Line Item OM15 - Custodial

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Custodial Support covers basic cleaning support including cleaning of locker rooms and restrooms, common areas, office areas, conference rooms. Tasks include floor maintenance (vacuuming, sweeping, mopping, and polishing), bathroom cleaning and stocking of supplies and materials, housekeeping,						
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disposal of rubbish, dusting office furniture, and light outside cleaning and snow management.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	L030	UTILITY WORKER	KD10H	776 Complex Steelworkers	Linear	5.400.00	Hours
Factors	3	Utility Workers	1800	Hours per year				

Line Item OM16 - Laundry

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - Laundry stocking includes sorting and distributing anti-c clothing within Buildings 776/777 and the B778 change room.							
	This pays for modesty clothing and anti-c clothing.							

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	L090	GENERAL LABORER	C235S	Laundry Services	Linear	786.00	Hours
Factors	524	hours	1.5	50% increase in needs over FY-99				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	624.00	Hours
Factors	1	Process Specialist	8	Hours Straight Time per week	52	weeks per year	1.5	50% increase in needs over FY-99
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.248.00	Hours
Factors	2	Process Specialists	8	Hours per week	52	weeks per year	1.5	50% increase in needs over FY-99
A5F	CSS FIXED PRICE	0000	NONE	K260S	Site Operations	Linear	1.062.000.00	Dollars
Factors	59000	Dollars/Month 2/00-4/00	12	Months	1.5	usage rate		

Line Item OM17 - Training

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - Training Qualification for personnel attending courses required for job performance as defined in the Qualification Performance & Training records for each building specific department and skill code.							
	Education Reimbursement covers formal approved off-site educational programs and/or attendance at off-site training seminars that directly benefit the employees' performance.							
	The Training Coordinator ensures compliance with plant training standards, advises building management regarding training requirements, and provides guidance to the Training Scheduler for implementation of plantwide training standards.							
	The Training Scheduler provides logistics information regarding training sessions and schedules attendance of building personnel at required training courses.							
	Rad Ops Training funds support time spent in class to maintain sufficient qualifications.							

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	774.00	Hours
Factors	9	Personnel	86	Hours				
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	1.204.00	Hours
Factors	14	Personnel	86	Hours				
751	OVERTIME BASE & PRE.	E130	OTHER ENGINEERS	R100S	RMRS Salaried	Linear	516.00	Hours
Factors	6	Personnel	86	Hours				
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	3.240.00	Hours
Factors	18	Hours/quarterly module	45	RCTs	4	quarters		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	162.00	Hours
Factors	9	Personnel	18	Hours (RCRA)				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	7.224.00	Hours
Factors	84	D&D Workers	86	hours each per year general training				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.376.00	Hours
Factors	16	Personnel	86	Hours				
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	K399S	Building 776 Project	Linear	144.000.00	Dollars
Factors	1	Subcontracted Trainer Randozzo	1800	hours	80	dollars per hour		

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A5H	SUBCONTRACTED SRVS	P150	TRAINERS	R100S	RMRS Salaried	Linear	90.000.00	Dollars
Factors	1	RMRS Trainer Mendoza	1800	hours	50	dollars per hour		
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K399S	Building 776 Project	Linear	70.000.00	Dollars
Factors	3500	\$/s per Education Reimbursement	20	Personnel				

Line Item OM18 - Price Anderson Coordination

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - This activity includes support for authorization, review, and processing of Price Anderson Amendment Act (PAAA) issues. These items include reviewing Occurrence Reports, Radiological Deficiency Reports (RDR), Facility assessments, audits and surveillance reports, and adverse trends and indicators. The PAAA Coordinator investigates and documents issues/events or conditions at the facility level to the degree deemed necessary by the PA Compliance Manager and/or the RMRS General Council. This may include such activities as attending fact-finding meetings, participating in root cause investigations, interviewing facility personnel, reviewing records, participating in the development of corrective actions and generating closure documentation. In addition, this line contains the work scope for the Commitments Tracking Coordinator who is responsible for tracking all external and internal commitments for B776/777 personnel. This includes Corrective Action Requests (CAR), Deficiency Reports (DR), Environmental Commitments, JCUSC Safety Concerns, Compliance Schedule Agreements (CSA), Short-Term Compliance Statements (STCS), and all DOE commitments. Responsible for ensuring status revision requests, interim certificates of completion, and final certificates of completion are submitted to site Commitments Tracking personnel as required.							

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	67.600.00	Dollars
	Factors	20	Hours per week coordinating Price	52	weeks per year	65	Dollars per hour		
	A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	60.840.00	Dollars
	Factors	18	hours per week for commitments	52	weeks per year	65	dollars per hour		

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	140.433.20	Dollars
	Factors 140433 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	92.650.54	Dollars
	Factors 92650.5 Dollars									

Activity ID: 1DF0401M10 Description: FY-01 Personnel Relo & Property Disposition

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
776-1CPA	Computer/Comm. Equipment Disposition	0.00	P1CPA	HC	#Num!	0	0	0	0	0	0	0
776-1FPA	Office Furniture Disposition	0.00	P1FPA	HC	#Num!	0	0	0	0	0	0	0
776-PersonnelRel	Personnel Relocation	22.00	each	HC	0	0	0	9.512	0	9.512	0	9.512
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	503	503	0	503
Total for Activity 1DF0401M10:						0	0	9.512	503	10.015	0	10.015

Line Item 776-1CPA - Computer/Comm. Equipment Disposition

BOE	Resource unit values are from Disposal Cost Model. Line Item quantity for FY-01 is planned to be insignificant. This line item is being included in the work plan for future modification if necessary.									
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		E120	SAFETY ENGINEERS		C100S	Closure Site Services	Linear	0.20Hours
	Factors	0.2 Hazard Assessment								
	750	STRAIGHT TIME BASE		L050	MISSION SUP SPEC I (CBLFAB.DSP)		C270S	Property Management	Linear	0.20Hours
	Factors	0.2 Readiness/Removal								
	750	STRAIGHT TIME BASE		L070	MISSION SUP SPEC III		C270S	Property Management	Linear	0.10Hours
	Factors	0.1 Material Handling								
	750	STRAIGHT TIME BASE		M020	MANAGERS (GRADE 69 - 72)		C270S	Property Management	Linear	0.10Hours
	Factors	0.1 Administrative								
	750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE		C242S	Transportation	Linear	0.20Hours
	Factors	0.2 Transportation								
	750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE		C270S	Property Management	Linear	0.25Hours
Factors	0.25 Administrative									

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Line Item 776-1FPA - Office Furniture Disposition

BOE Resource unit values are from Disposal Cost Model.
Line Item quantity for FY-01 is planned to be insignificant. This line item is being included in the work plan for future modification if necessary.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	C270S	Property Management	Linear	0.30	Hours
	Factors	0.3 Readiness/Removal							
	750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	C270S	Property Management	Linear	0.10	Hours
	Factors	0.1 Material Handling							
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C270S	Property Management	Linear	0.10	Hours
	Factors	0.1 Administrative							
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	0.20	Hours
	Factors	0.2 Transportation							
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C270S	Property Management	Linear	0.25	Hours
Factors	0.25 Administrative								

Line Item 776-PersonnelRelo - Personnel Relocation

BOE Historical Data Source - Personnel Relocation Planning Template (3/12/99) and associated guidance on average cost for relocation.
Item Desc - Relocate Personnel Supporting B776/777 Closure
Breakdown of Historical Data:
Item - Personnel Relocation
Units - ea
Unit Cost - 432.35
Unit Cost Adjustment factor - None
Revised Unit Cost - 432.35
Basis for adjustment -

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	C100S	Closure Site Services	Linear	432.35	Dollars
	Factors 432.35 Dollars per employee relocation								

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	303.16	Dollars
	Factors 303.161 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	200.01	Dollars
	Factors 200.01 Dollars									

Activity ID: 1DF0402M10 Description: FY-02 Personnel Relo & Property Disposition

Line Item		Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
776-1CPA	Computer/Comm. Equipment Disposition	0.00	P1CPA	HC	#Num!	0	0	0	0	0	0	0	0
776-1FPA	Office Furniture Disposition	0.00	P1FPA	HC	#Num!	0	0	0	0	0	0	0	0
776-PersonelRelo	Personnel Relocation	7.00	each	HC	0	0	0	3.026	0	3.026	0	0	3.026
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	0	451	451	0	451
Total for Activity 1DF0402M10:							0	0	3.026	451	3.478	0	3.478

Line Item 776-1CPA - Computer/Comm. Equipment Disposition

BOE Resource unit values are from Disposal Cost Model.
Line Item quantity for FY-02 is planned to be insignificant. This line item is being included in the work plan for future modification if necessary.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	C100S	Closure Site Services	Linear	0.20	Hours
	Factors 0.2 Hazard Assessment								
	750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	C270S	Property Management	Linear	0.20	Hours
	Factors 0.2 Readiness/Removal								
	750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	C270S	Property Management	Linear	0.10	Hours
	Factors 0.1 Material Handling								

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750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C270S	Property Management	Linear	0.10	Hours
Factors	0.1	Administrative						
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	0.20	Hours
Factors	0.2	Transportation						
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C270S	Property Management	Linear	0.25	Hours
Factors	0.25	Administrative						

Line Item 776-1FPA - Office Furniture Disposition

BOE Resource unit values are from Disposal Cost Model.
Line Item quantity for FY-02 is planned to be insignificant. This line item is being included in the work plan for future modification if necessary.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP)	C270S	Property Management	Linear	0.30	Hours
	Factors	0.3 Readiness/Removal							
	750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	C270S	Property Management	Linear	0.10	Hours
	Factors	0.1 Material Handling							
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C270S	Property Management	Linear	0.10	Hours
	Factors	0.1 Administrative							
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	0.20	Hours
	Factors	0.2 Transportation							
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C270S	Property Management	Linear	0.25	Hours
Factors	0.25 Administrative								

Line Item 776-PersonelRelo - Personnel Relocation

BOE Historical Data Source - Personnel Relocation Planning Template (3/12/99) and associated guidance on average cost for relocation.
Item Desc - Relocate Personnel Supporting B776/777 Closure
Breakdown of Historical Data:
Item - Personnel Relocation
Units - ea
Unit Cost - 432.35
Unit Cost Adjustment factor - None
Revised Unit Cost - 432.35
Basis for adjustment -

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	C100S	Closure Site Services	Linear	432.35	Dollars
	Factors 432.35 Dollars per employee relocation								

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	309.75	Dollars
	Factors 309.748 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	141.43	Dollars
	Factors 141.430 Dollars									

Activity ID: 1DF0402MG0 Description: FY-02 B776 Operations Management

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OM04	Configuration Control Authority (CCA)	1.00	ea	HC	12.960	12.960	347.782	0	0	347.782	122.767	470.549
OM07	Environmental Technical Support	1.00	ea	HC	0	0	0	454.400	0	454.400	0	454.400
OM08	Utility Management	1.00	ea	HC	0	0	0	153.000	0	153.000	0	153.000
OM09	SOE's	1.00	ea	HC	20.148	20.148	449.298	0	0	449.298	158.602	607.900
OM10	Shift & Operations Orders	1.00	ea	HC	0	0	0	61.560	0	61.560	0	61.560
OM12	Decontamination	1.00	ea	H	1.136	1.136	30.807	0	0	30.807	10.875	41.683
OM14	Management Assessment Program	1.00	ea	H	0	0	0	124.800	0	124.800	0	124.800
OM15	Custodial	1.00	ea	HC	5.400	5.400	91.152	0	0	91.152	32.177	123.329
OM16	Laundry	1.00	ea	HC	2.658	2.658	63.408	1,062.000	0	1,125.408	22.383	1,147.791
OM17	Training	1.00	ea	HC	17.480	17.480	535,252	304.000	0	839,252	188.944	1,028.196

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OM18	Price Anderson Coordination	1.00	each	HC	0	0	0	128.440	0	128.440	0	128.440
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	647.245	647.245	647.245	0	647.245
Total for Activity 1DF0402MG0:						59.782	1,517.699	2,288.200	647.245	4,453.144	535.748	4,988.892

Line Item OM04 - Configuration Control Authority (CCA)

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Configuration Control Authorities (CCA) are the single point work release for the authorization of activities in B776/777. The CCA ensures that activities are appropriately planned, scheduled, technically reviewed and may be conducted within the applicable authorization basis. The CCA shall be cognizant of safety system status in order to release work to be conducted within the AB. The CCA shall act as the emergency incident commander in the event that an upset condition arises or an emergency response is warranted.</p> <p>Overtime required to support maintenance and emerging activities to ensure safety and operability of the facility is included in this basis of estimate.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	10.800.00	Hours
Factors	6 CCAs	1800	Hours per year					
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	2.160.00	Hours
Factors	10800 Hours ST	0.2	20% Overtime					

Line Item OM07 - Environmental Technical Support

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Acts as a single point of contact for all environmental compliance issues within designated buildings, reviews and approves Non Routine Waste Origination Logs, supports regulatory area inspections with CDPHE, EPA, DOE, and RFETS, and completes the appropriate pre- and post-status documents, maintains the Environmental Central File System for designated buildings, identifies corrective measures to environmental compliance related deficiencies and prepares environmental compliance action plans, maintains the Waste Stream and Residue Characterization book for the building, initiates the reactive chemical management plan ensuring the proper notification are made and that the treatment complies with the building authorization basis, documents any generator treatment performed in the building, and ensures that the building is supplied with adequate spill response equipment.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E050	ENVIRONMENTAL ENGINEERS	K399S	Building 776 Project	Linear	288.000.00	Dollars
Factors	2 Environmental Technologists -	1800	hours per year	80	Dollars per hour RMRS Corporate			
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	166.400.00	Dollars
Factors	1 Administrative Support Personnel	40	Hours per Week	52	Weeks per year	80	Dollars per hour RMRS Corporate	

Line Item OM08 - Utility Management

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - Utility management includes the Utilities Manager and the Utilities Foreman, as follows: The Utilities Manager oversees facility utility operations per DOE and Site Standards. Specific responsibilities include ensuring that utility systems and equipment function safely and properly; that surveillances are performed in a safe and timely manner; that applicable training and qualification standards are met by management, technical, and Stationary Operating Engineers; and that all activities are in concert with the plant, building , and programs objectives.</p> <p>The Utilities Foreman directly oversees the daily SOE activities and ensures that all required activities are conducted in a safe, timely, and proper manner, and in accordance with management guidance.</p>											
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Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	153.000.00	Dollars
Factors	85 dollars per hour	1	Utilitiv Specialist Theesfeld	1800	Hours/ea			

Line Item OM09 - SOE's

BOE	<p>Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.</p> <p>Item Desc - The Stationary Operating Engineers (SOEs) are required to be present around the clock and are on various jump shifts, 365 days per year to</p>											
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monitor both the control room and compressor house, and to make shiftly rounds. One SOE is required to cover the control room and one SOE is required to cover the compressor house and make shiftly rounds. Overtime is added to account for shift turnover, training, and absences due to illness, or vacations. SOEs also perform the following surveillances during their shiftly rounds: Photohelics; EGEN; Fan Operatibity; Oxygen Analyzers; and Hepa Filter Differential Pressure.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KD10H 776 Complex Steelworkers	Linear	17,589.21	Hours
Factors		0.873	In FY-98 approximately 87.3% of this	2.3	SOEs	24	Hours per day (over 3 shifts)
751		OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KD10H 776 Complex Steelworkers	Linear	2,558.80	Hours
Factors		0.127	approximately 12.7% of the coverage	2.3	SOEs	24	Hours per day
						365	days per year (continuous coverage)
							365 days per year to provide total

Line Item OM10 - Shift & Operations Orders

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
		Item Desc - Operations and Shift Orders Administration includes ongoing maintenance of all active building operations and shift orders by an experienced technical writer-administrator. Generally, the administrator updates existing orders in response to the building's day-to-day operating demands and in accordance with standing plant policies and procedures. In some cases, the administrator may develop an original order. In addition, the administrator processes the orders in accordance with plant and DOE standards, maintains an accurate and current working file, and maintains an up-to-date Operations Orders Manual. The administrator works in conjunction with building professional staff and management, subject matter experts, and other technical writers in order to ensure the accuracy, timeliness, and thoroughness of the operations orders.					

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A57		LATA	P160 TECHNICAL WRITERS AND EDITOR	K399S Building 776 Project	Linear	54,000.00	Dollars
Factors		60	dollars per hour Chartrand	900	hours		
A57		LATA	P160 TECHNICAL WRITERS AND EDITOR	K399S Building 776 Project	Linear	7,560.00	Dollars
Factors		0.07	7% overtime	60	dollars per hour	1800	hours straight time

Line Item OM12 - Decontamination

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev0.					
		Item Desc - Provide as needed decontamination support to support various operations in B776/777.					

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	R100S RMRS Salaried	Linear	180.00	Hours
Factors		1	Industrial Hygienist	9	Hours per day performing Be Decon	20	days per year performing Be Decon
750		STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KD10H 776 Complex Steelworkers	Linear	180.00	Hours
Factors		1	RCT	9	hours per day Be Decon	20	days performing Be decon per year
750		STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	360.00	Hours
Factors		2	Process Specialists	9	hours per day for Be Decon	20	days
751		OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	416.00	Hours
Factors		8	hours per week Pu Decon	52	weeks per year		

Line Item OM14 - Management Assessment Program

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
		Item Desc - Coordination of Management Assessment Program for the 776/777 buildings. Reviews and tracks items identified through the performance of MAP's. Inputs actions into the PATS system and tracks to completion.					

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A53		E-2	P170 OTHER ADMINISTRATIVE & PROFE	K399S Building 776 Project	Linear	124,800.00	Dollars
Factors		52	weeks per year Scott	60	dollars per hour	40	hours per week coordinate/administer

Line Item OM15 - Custodial

BOE		Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.					
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Item Desc - Custodial Support covers basic cleaning support including cleaning of locker rooms and restrooms, common areas, office areas, conference rooms. Tasks include floor maintenance (vacuuming, sweeping, mopping, and polishing), bathroom cleaning and stocking of supplies and materials, housekeeping, disposal of rubbish, dusting office furniture, and light outside cleaning and snow management.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	L030	UTILITY WORKER	KD10H	776 Complex Steelworkers	Linear	5.400.00	Hours
Factors	3	Utility Workers	1800	Hours per year				

Line Item OM16 - Laundry

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Laundry stocking includes sorting and distributing anti-c clothing within Buildings 776/777 and the B778 change room.

This pays for modesty clothing and anti-c clothing.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	L090	GENERAL LABORER	C235S	Laundry Services	Linear	786.00	Hours
Factors	524	hours	1.5	50% increase in needs over FY-99				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	624.00	Hours
Factors	1	Process Specialist	8	Hours Straight Time per week	52	weeks per year	1.5	50% increase in needs over FY-99
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.248.00	Hours
Factors	2	Process Specialists	8	Hours per week	52	weeks per year	1.5	50% increase in needs over FY-99
A5F	CSS FIXED PRICE	0000	NONE	K260S	Site Operations	Linear	1.062.000.00	Dollars
Factors	59000	Dollars/Month 2/00-4/00	12	Months	1.5	usage rate		

Line Item OM17 - Training

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Training Qualification for personnel attending courses required for job performance as defined in the Qualification Performance & Training records for each building specific department and skill code.

Education Reimbursement covers formal approved off-site educational programs and/or attendance at off-site training seminars that directly benefit the employees' performance.

The Training Coordinator ensures compliance with plant training standards, advises building management regarding training requirements, and provides guidance to the Training Scheduler for implementation of plantwide training standards.

The Training Scheduler provides logistics information regarding training sessions and schedules attendance of building personnel at required training courses.

Rad Ops Training funds support time spent in class to maintain sufficient qualifications.

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KD10H	776 Complex Steelworkers	Linear	774.00	Hours
Factors	9	Personnel	86	Hours				
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	2.322.00	Hours
Factors	27	Personnel	86	Hours				
751	OVERTIME BASE & PRE.	E130	OTHER ENGINEERS	R100S	RMRS Salaried	Linear	774.00	Hours
Factors	9	Personnel	86	Hours				
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	3.816.00	Hours
Factors	18	Hours/quarterly module	53	RCTs	4	quarters		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.376.00	Hours
Factors	16	Personnel	86	Hours				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	8.256.00	Hours
Factors	96	D&D Workers	86	hours each per year general training				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	162.00	Hours
Factors	9	Personnel	18	Hours (RCRA)				

WBS No: 1DAB04
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A5H	SUBCONTRACTED SRVS	P150	TRAINERS	K399S	Building 776 Project	Linear	144,000.00	Dollars
Factors	1	Subcontracted Trainer Randozzo	1800	hours	80	dollars per hour		
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	R100S	RMRS Salaried	Linear	90,000.00	Dollars
Factors	1	RMRS Trainer Mendoza	1800	hours	50	dollars per hour		
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K399S	Building 776 Project	Linear	70,000.00	Dollars
Factors	3500	\$/s per Education Reimbursement	20	Personnel				

Line Item OM18 - Price Anderson Coordination

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - This activity includes support for authorization, review, and processing of Price Anderson Amendment Act (PAAA) issues. These items include reviewing Occurrence Reports, Radiological Deficiency Reports (RDR), Facility assessments, audits and surveillance reports, and adverse trends and indicators. The PAAA Coordinator investigates and documents issues/events or conditions at the facility level to the degree deemed necessary by the PA Compliance Manager and/or the RMRS General Council. This may include such activities as attending fact-finding meetings, participating in root cause investigations, interviewing facility personnel, reviewing records, participating in the development of corrective actions and generating closure documentation. In addition, this line contains the work scope for the Commitments Tracking Coordinator who is responsible for tracking all external and internal commitments for B776/777 personnel. This includes Corrective Action Requests (CAR), Deficiency Reports (DR), Environmental Commitments, JCUSC Safety Concerns, Compliance Schedule Agreements (CSA), Short-Term Compliance Statements (STCS), and all DOE commitments. Responsible for ensuring status revision requests, interim certificates of completion, and final certificates of completion are submitted to site Commitments Tracking personnel as required.							

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear
Factors	20	Hours per week coordinating Price	52	weeks per year	65	dollars per hour
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear
Factors	18	hours per week for commitments	52	weeks per year	65	dollars per hour

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	444,354.00	Dollars
	Factors 444354 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	202,891.40	Dollars
	Factors 202891 Dollars									

Activity ID: 1DF0403M10 Description: FY-03 Personnel Relo & Property Disposition

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
776-1CPA	Computer/Comm. Equipment Disposition	450.00	P1CPA	HC	1	473	10,394	0	0	10,394	3,596	13,990
776-1FPA	Office Furniture Disposition	2,050.00	P1FPA	HC	1	2,358	51,118	0	0	51,118	17,687	68,805
776-PR1	FY-03 Standard Personnel Relocation	13.00	each	HC	0	0	0	5,621	0	5,621	0	5,621
776-PR2	FY-03 Year End Evac of Remaining Personnel	65.00	each	HC	0	0	0	28,103	0	28,103	0	28,103
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	32,223	32,223	0	32,223
Total for Activity 1DF0403M10:						2,830	61,512	33,723	32,223	127,458	21,283	148,741

Line Item 776-1CPA - Computer/Comm. Equipment Disposition

BOE

Resource unit values are from Disposal Cost Model.
Line Item quantity for FY-00 is planned to be insignificant. This line item is being included in the work plan for future modification if necessary.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	C270S	Property Management	Linear	0.20	Hours
Factors	0.2 Readiness/Removal							
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	C270S	Property Management	Linear	0.10	Hours
Factors	0.1 Material Handling							
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C270S	Property Management	Linear	0.35	Hours
Factors	0.35 Administrative							
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	0.40	Hours
Factors	0.4 hour for swipes and report							

WBS No: 1DAB04
Activity ID: 1DF0403M10

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Line Item 776-1FPA - Office Furniture Disposition

BOE Resource unit values are from Disposal Cost Model.
Line Item quantity for FY-00 is planned to be insignificant. This line item is being included in the work plan for future modification if necessary.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	C270S	Property Management	Linear	0.30	Hours
	Factors	0.3 Readiness/Removal							
	750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC III	C270S	Property Management	Linear	0.10	Hours
	Factors	0.1 Material Handling							
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C270S	Property Management	Linear	0.35	Hours
	Factors	0.35 Administrative							
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	0.40	Hours
	Factors	0.4 hour swipes and report prep							

Line Item 776-PR1 - FY-03 Standard Personnel Relocation

BOE Historical Data Source - Personnel Relocation Planning Template (3/12/99) and associated guidance on average cost for relocation.
Item Desc - Relocate Personnel Supporting B776/777 Closure
Breakdown of Historical Data:
Item - Personnel Relocation
Units - ea
Unit Cost - 432.35
Unit Cost Adjustment factor - None
Revised Unit Cost - 432.35
Basis for adjustment -

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	C100S	Closure Site Services	Linear	432.35	Dollars
	Factors 432.35 Dollars per employee relocation								

Line Item 776-PR2 - FY-03 Year End Evac of Remaining Personnel

BOE Historical Data Source - Personnel Relocation Planning Template (3/12/99) and associated guidance on average cost for relocation.
Item Desc - Relocate Personnel Supporting B776/777 Closure
Breakdown of Historical Data:
Item - Personnel Relocation
Units - ea
Unit Cost - 432.35
Unit Cost Adjustment factor - None
Revised Unit Cost - 432.35
Basis for adjustment -

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	C100S	Closure Site Services	Max Backload	432.35	Dollars
	Factors 432.35 Dollars per employee relocation								

Line Item SYS - Contingency And Escalation

BOE

Resources	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	23,288.19	Dollars
	<i>Factors</i> 23288.2 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8,935.21	Dollars
	<i>Factors</i> 8935.21 Dollars								

Activity ID: 1DF0403MG0 Description: FY-03 B776 Operations Management

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OM04	Configuration Control Authority (CCA)	1.00	ea	HC	12.960	12.960	347.782	0	0	347.782	120.332	468.114
OM07	Environmental Technical Support	1.00	ea	HC	0	0	0	454.400	0	454.400	0	454.400
OM08	Utility Management	1.00	ea	HC	0	0	0	153.000	0	153.000	0	153.000
OM09	SOE's	1.00	ea	HC	20.148	20.148	449.298	0	0	449.298	155.457	604.755
OM10	Shift & Operations Orders	1.00	ea	HC	0	0	0	61.560	0	61.560	0	61.560
OM12	Decontamination	1.00	ea	H	1.136	1.136	30.807	0	0	30.807	10.659	41.467

WBS No: 1DAB04
Activity ID: 1DF0403MG0

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OM14	Management Assessment Program	1.00	ea	H	0	0	0	124.800	0	124.800	0	124.800
OM15	Custodial	1.00	ea	HC	5.400	5.400	91.152	0	0	91.152	31.539	122.691
OM16	Laundrv	1.00	ea	HC	2.658	2.658	63.408	720.000	0	783.408	21.939	805.347
OM17	Training	1.00	ea	HC	19.806	19.806	618.241	304.000	0	922.241	213.911	1.136.152
OM18	Price Anderson Coordination	1.00	each	HC	0	0	0	128.440	0	128.440	0	128.440
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1.134.068	1.134.068	0	1.134.068
Total for Activity 1DF0403MG0:						62.108	1.600.687	1.946.200	1.134.068	4.680.955	553.838	5.234.793

Line Item OM04 - Configuration Control Authority (CCA)

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - Configuration Control Authorities (CCA) are the single point work release for the authorization of activities in B776/777. The CCA ensures that activities are appropriately planned, scheduled, technically reviewed and may be conducted within the applicable authorization basis. The CCA shall be cognizant of safety system status in order to release work to be conducted within the AB. The CCA shall act as the emergency incident commander in the event that an upset condition arises or an emergency response is warranted.											
	Overtime required to support maintenance and emerging activities to ensure safety and operability of the facility is included in this basis of estimate.											

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	10.800.00	Hours
Factors	6 CCAs	1800	Hours per year					
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	2.160.00	Hours
Factors	10800 Hours ST	0.2	20% Overtime					

Line Item OM07 - Environmental Technical Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - Acts as a single point of contact for all environmental compliance issues within designated buildings, reviews and approves Non Routine Waste Origination Logs, supports regulatory area inspections with CDPHE, EPA, DOE, and RFETS, and completes the appropriate pre- and post-status documents, maintains the Environmental Central File System for designated buildings, identifies corrective measures to environmental compliance related deficiencies and prepares environmental compliance action plans, maintains the Waste Stream and Residue Characterization book for the building, initiates the reactive chemical management plan ensuring the proper notification are made and that the treatment complies with the building authorization basis, documents any generator treatment performed in the building, and ensures that the building is supplied with adequate spill response equipment.											

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E050	ENVIRONMENTAL ENGINEERS	K399S	Building 776 Project	Linear	288.000.00	Dollars
Factors	2 Environmental Technologists -	1800	hours per year	80	Dollars per hour RMRS Corporate			
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	166.400.00	Dollars
Factors	1 Administrative Support Personnel	40	Hours per Week	52	Weeks per year	80	Dollars per hour RMRS Corporate	

Line Item OM08 - Utility Management

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - Utility management includes the Utilities Manager and the Utilities Foreman, as follows: The Utilities Manager oversees facility utility operations per DOE and Site Standards. Specific responsibilities include ensuring that utility systems and equipment function safely and properly; that surveillances are performed in a safe and timely manner; that applicable training and qualification standards are met by management, technical, and Stationary Operating Engineers; and that all activities are in concert with the plant, building , and programs objectives. The Utilities Foreman directly oversees the daily SOE activities and ensures that all required activities are conducted in a safe, timely, and proper manner, and in accordance with management guidance. Also included in this element are resources to cover the LO/TO requirements.											

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	153.000.00	Dollars
Factors	85 dollars per hour	1	Utiliv Specialist Theesfeld	1800	Hours/ea			

WBS No: 1DAB04
Activity ID: 1DF0403MG0

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Line Item OM09 - SOE's

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - The Stationary Operating Engineers (SOEs) are required to be present around the clock and are on various jump shifts, 365 days per year to monitor both the control room and compressor house, and to make shiftly rounds. One SOE is required to cover the control room and one SOE is required to cover the compressor house and make shiftly rounds. Overtime is added to account for shift turnover, training, and absences due to illness, or vacations. SOEs also perform the following surveillances during their shiftly rounds: Photohelics; EGEN; Fan Operatibity; Oxygen Analyzers; and Hepa Filter Differential Pressure.					
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	17,589.21	Hours
Factors	0.873	In FY-98 approximately 87.3% of this	2.3	SOEs	24	Hours per day (over 3 shifts)	365	days per year (continuous coverage)
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	2,558.80	Hours
Factors	0.127	approximately 12.7% of the coverage	2.3	SOEs	24	Hours per day	365	days per year to provide total

Line Item OM10 - Shift & Operations Orders

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Operations and Shift Orders Administration includes ongoing maintenance of all active building operations and shift orders by an experienced technical writer-administrator. Generally, the administrator updates existing orders in response to the building's day-to-day operating demands and in accordance with standing plant policies and procedures. In some cases, the administrator may develop an original order. In addition, the administrator processes the orders in accordance with plant and DOE standards, maintains an accurate and current working file, and maintains an up-to-date Operations Orders Manual. The administrator works in conjunction with building professional staff and management, subject matter experts, and other technical writers in order to ensure the accuracy, timeliness, and thoroughness of the operations orders.					
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Cost Element		Skill		Department		Curve	Quantity	Units
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Buildina 776 Project	Linear	7,560.00	Dollars
Factors	0.07	7% overtime	60	dollars per hour	1800	hours straight time		
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Buildina 776 Project	Linear	54,000.00	Dollars
Factors	60	dollars per hour Chartrand	900	hours				

Line Item OM12 - Decontamination

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev0. Item Desc - Provide as needed decontamination support to support various operations in B776/777.					
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	R100S	RMRS Salaried	Linear	180.00	Hours
Factors	1	Industrial Hvgienist	9	Hours per day performinga Be Decon	20	days per year performinga Be Decon		
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	180.00	Hours
Factors	1	RCT	9	hours per day Be Decon	20	days performinga Be decon per year		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	360.00	Hours
Factors	2	Process Specialists	9	hours per day for Be Decon	20	days		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	416.00	Hours
Factors	8	hours per week Pu Decon	52	weeks per year				

Line Item OM14 - Management Assessment Program

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Coordination of Management Assessment Program for the 776/777 buildings. Reviews and tracks items identified through the performance of MAP's. Inputs actions into the PATS system and tracks to completion.					
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Cost Element		Skill		Department		Curve	Quantity	Units
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WBS No: 1DAB04
Activity ID: 1DF0403MG0

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A53	E-2	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	124.800.00	Dollars
Factors	52		weeks per year Scott	60	dollars per hour	40	hours per week coordinate/administer	

Line Item OM15 - Custodial

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Custodial Support covers basic cleaning support including cleaning of locker rooms and restrooms, common areas, office areas, conference rooms. Tasks include floor maintenance (vacuuming, sweeping, mopping, and polishing), bathroom cleaning and stocking of supplies and materials, housekeeping, disposal of rubbish, dusting office furniture, and light outside cleaning and snow management.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	L030	UTILITY WORKER	KD10H	776 Complex Steelworkers	Linear	5.400.00	Hours
	Factors	3	Utility Workers	1800	Hours per year				

Line Item OM16 - Laundry

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Laundry stocking includes sorting and distributing anti-c clothing within Buildings 776/777 and the B778 change room.

This pays for modesty clothing and anti-c clothing.

Resources	Cost Element			Skill			Department			Curve	Quantity	Units				
	750	STRAIGHT TIME BASE			L090	GENERAL LABORER			C235S	Laundry Services			Linear	786.00	Hours	
	Factors		524	hours		1.5	50% increase in needs over FY-99									
	750	STRAIGHT TIME BASE			T060	D&D HAZ REDUC TECH / RISK RED			KD10H	776 Complex Steelworkers			Linear	624.00	Hours	
	Factors		1	Process Specialist		8	Hours Straight Time per week					52	weeks per year	1.5	50% increase in needs over FY-99	
	751	OVERTIME BASE & PRE.			T060	D&D HAZ REDUC TECH / RISK RED			KD10H	776 Complex Steelworkers			Linear	1,248.00	Hours	
	Factors		2	Process Specialists		8	Hours per week					52	weeks per year	1.5	50% increase in needs over FY-99	
	A5F	CSS FIXED PRICE			0000	NONE			K260S	Site Operations			Linear	720,000.00	Dollars	
	Factors		60000	Dollars/Month		12	Months									

Line Item OM17 - Training

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Training Qualification for personnel attending courses required for job performance as defined in the Qualification Performance & Training records for each building specific department and skill code.

Education Reimbursement covers formal approved off-site educational programs and/or attendance at off-site training seminars that directly benefit the employees' performance.

The Training Coordinator ensures compliance with plant training standards, advises building management regarding training requirements, and provides guidance to the Training Scheduler for implementation of plantwide training standards.

The Training Scheduler provides logistics information regarding training sessions and schedules attendance of building personnel at required training courses.

Rad Ops Training funds support time spent in class to maintain sufficient qualifications.

Resources	Cost Element			Skill		Department		Curve	Quantity	Units		
	750	STRAIGHT TIME BASE		C020	ELECTRICIANS		KD10H	776 Complex Steelworkers		Linear	774.00	Hours
	Factors	9	Personnel		86	Hours						
	750	STRAIGHT TIME BASE		R070	WASTE TREATMENT OPERATOR A		KD10H	776 Complex Steelworkers		Linear	1.806.00	Hours
	Factors	21	Personnel		86	Hours						
	751	OVERTIME BASE & PRE.		E130	OTHER ENGINEERS		R100S	RMRS Salaried		Linear	688.00	Hours
	Factors	8	Personnel		86	Hours						
	751	OVERTIME BASE & PRE.		T050	RADIATION CONTROL TECHNOLOGI		KD10H	776 Complex Steelworkers		Linear	4.680.00	Hours
	Factors	18	Hours/quarterly module		65	RCTs		4	quarters			

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751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	10.320.00	Hours
Factors	120	D&D Workers	86	hours each per year general training				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.376.00	Hours
Factors	16	Personnel	86	Hours				
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	162.00	Hours
Factors	9	Personnel	18	Hours (RCRA)				
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	K399S	Building 776 Project	Linear	144.000.00	Dollars
Factors	1	Subcontracted Trainer Randozzo	1800	hours	80	dollars per hour		
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	R100S	RMRS Salaried	Linear	90.000.00	Dollars
Factors	1	RMRS Trainer Mendoza	1800	hours	50	dollars per hour		
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K399S	Building 776 Project	Linear	70.000.00	Dollars
Factors	3500	\$/s per Education Reimbursement	20	Personnel				

Line Item OM18 - Price Anderson Coordination

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - This activity includes support for authorization, review, and processing of Price Anderson Amendment Act (PAAA) issues. These items include reviewing Occurrence Reports, Radiological Deficiency Reports (RDR), Facility assessments, audits and surveillance reports, and adverse trends and indicators. The PAAA Coordinator investigates and documents issues/events or conditions at the facility level to the degree deemed necessary by the PA Compliance Manager and/or the RMRS General Council. This may include such activities as attending fact-finding meetings, participating in root cause investigations, interviewing facility personnel, reviewing records, participating in the development of corrective actions and generating closure documentation. In addition, this line contains the work scope for the Commitments Tracking Coordinator who is responsible for tracking all external and internal commitments for B776/777 personnel. This includes Corrective Action Requests (CAR), Deficiency Reports (DR), Environmental Commitments, JCUSC Safety Concerns, Compliance Schedule Agreements (CSA), Short-Term Compliance Statements (STCS), and all DOE commitments. Responsible for ensuring status revision requests, interim certificates of completion, and final certificates of completion are submitted to site Commitments Tracking personnel as required.							

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS		P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	67.600.00	Dollars
	Factors	20	Hours per week coordinating	Price	52	weeks per year	65	dollars per hour		
	A5H	SUBCONTRACTED SRVS		P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	60.840.00	Dollars
	Factors	18	hours per week for commitments		52	weeks per year	65	dollars per hour		

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	819.602.70	Dollars
	Factors 819603 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	314.465.20	Dollars
	Factors 314465 Dollars									

Activity ID: 1DXX04400 Description: End B776 Facility Landlord

Activity ID: 1DXX04400		Description: End B776 Facility Landlord						Cost Risk		2 Schedule Risk		3	
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost	
OM04	Configuration Control Authority (CCA)	0.22	ea	HC	12.960	2.801	75.175	0	0	75.175	26.161	101.337	
OM07	Environmental Technical Support	0.22	ea	HC	0	0	0	98.222	0	98.222	0	98.222	
OM08	Utility Management	0.22	ea	HC	0	0	0	33.072	0	33.072	0	33.072	
OM09	SOE's	0.22	ea	HC	28.225	6.101	140.616	0	0	140.616	48.934	189.551	
OM10	Shift & Operations Orders	0.22	ea	HC	0	0	0	24.979	0	24.979	0	24.979	
OM12	Decontamination	0.22	ea	H	870	188	4.779	0	0	4.779	1.663	6.442	
OM14	Management Assessment Program	0.22	ea	H	0	0	0	26.976	0	26.976	0	26.976	
OM15	Custodial	0.22	ea	HC	5.400	1.167	19.703	0	0	19.703	6.857	26.560	
OM16	Laundry	0.66	ea	HC	2.658	1.741	41.533	471.616	0	513.149	14.454	527.603	
OM17	Training	0.22	ea	HC	6.136	1.326	30.672	7.566	0	38.237	10.674	48.911	
OM18	Price Anderson Coordination	0.66	each	HC	0	0	0	90.603	0	90.603	0	90.603	
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1.558.088	1.558.088	0	1.558.088	
T02	Radiological Engineering	0.66	ea	HC	0	0	0	200.437	0	200.437	0	200.437	

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T03	Stepoff Pad	0.66	ea	H	2,574	1,686	36,895	0	0	36,895	12,839	49,734
T04	Contamination Control	0.66	ea	H	515	337	7,379	0	0	7,379	2,568	9,947
T05	Radiological Work Permit	0.22	ea	H	2,317	501	10,958	0	0	10,958	3,813	14,771
T06	ALARA Committee	0.66	ea	HC	60	39	806	0	0	806	281	1,087
T07	Analytical Lab - DAC	6,288.21	each	H	0	0	0	138,341	0	138,341	0	138,341
T08	Nuclear Safety Support	0.66	each	HC	0	0	0	200,437	0	200,437	0	200,437
T10	Electrical Engineering	0.66	ea	H	0	0	0	172,755	0	172,755	0	172,755
T11	Mechanical Engineering	0.66	ea	HC	0	0	0	182,751	0	182,751	0	182,751
T13	Fire Protection Engineering	0.66	ea	HC	0	0	0	100,218	0	100,218	0	100,218
T14	Emergency Preparedness	0.66	ea	HC	144	94	1,939	56,004	0	57,943	675	58,618
T15	Procedures	0.22	ea	HC	0	0	0	25,290	0	25,290	0	25,290
T16	Criticality Engineering	0.22	ea	HC	0	0	0	82,680	0	82,680	0	82,680
T17	Plan of the Week/DOD	0.66	ea	HC	936	613	16,082	0	0	16,082	5,596	21,678
T19	Project Safety Officer	0.66	each	HC	0	0	0	100,218	0	100,218	0	100,218
T20	Plant Review Committee	0.22	each	HC	104	22	590	3,822	0	4,411	205	4,617
T21	Health Physics And Instrumentation	0.22	ea	H	0	0	0	53,809	0	53,809	0	53,809
T22	Radiological Management	0.66	each	HC	5,140	3,367	95,398	16,376	0	111,774	33,199	144,972
T23	Criticality Safety Officer	0.66	ea	HC	0	0	0	100,218	0	100,218	0	100,218
T24	Occurrence Reporting	0.66	each	HC	0	0	0	50,109	0	50,109	0	50,109
T27	Chemical Control Officer	0.22	ea	HC	0	0	0	33,072	0	33,072	0	33,072
Total for Activity 1DXXX04400:						19,985	482,526	2,269,571	1,558,088	4,310,185	167,919	4,478,104

Line Item OM04 - Configuration Control Authority (CCA)

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - Configuration Control Authorities (CCA) are the single point work release for the authorization of activities in B776/777. The CCA ensures that activities are appropriately planned, scheduled, technically reviewed and may be conducted within the applicable authorization basis. The CCA shall be cognizant of safety system status in order to release work to be conducted within the AB. The CCA shall act as the emergency incident commander in the event that an upset condition arises or an emergency response is warranted.											
	Overtime required to support maintenance and emerging activities to ensure safety and operability of the facility is included in this basis of estimate.											

Resources			Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project		Linear		10,800.00	Hours
Factors	6	CCAs		1800	Hours per year						
	751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project		Linear		2,160.00	Hours
Factors	10800	Hours ST		0.2	20% Overtime						

Line Item OM07 - Environmental Technical Support

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.											
	Item Desc - Acts as a single point of contact for all environmental compliance issues within designated buildings, reviews and approves Non Routine Waste Origination Logs, supports regulatory area inspections with CDPHE, EPA, DOE, and RFETS, and completes the appropriate pre- and post-status documents, maintains the Environmental Central File System for designated buildings, identifies corrective measures to environmental compliance related deficiencies and prepares environmental compliance action plans, maintains the Waste Stream and Residue Characterization book for the building, initiates the reactive chemical management plan ensuring the proper notification are made and that the treatment complies with the building authorization basis, documents any generator treatment performed in the building, and ensures that the building is supplied with adequate spill response equipment.											

Resources			Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	E050	ENVIRONMENTAL ENGINEERS	K399S	Building 776 Project		Linear		288,000.00	Dollars
Factors	2	Environmental Technologists		1800	hours per year		80	Dollars per hour RMRS Corporate			
	A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project		Linear		166,400.00	Dollars
Factors	1	Administrative Support Personnel		40	Hours per Week		52	Weeks per year	80	Dollars per hour RMRS Corporate	

Line Item OM08 - Utility Management

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item											
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level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Utility management includes the Utilities Manager and the Utilities Foreman, as follows:

The Utilities Manager oversees facility utility operations per DOE and Site Standards. Specific responsibilities include ensuring that utility systems and equipment function safely and properly; that surveillances are performed in a safe and timely manner; that applicable training and qualification standards are met by management, technical, and Stationary Operating Engineers; and that all activities are in concert with the plant, building, and programs objectives.

The Utilities Foreman directly oversees the daily SOE activities and ensures that all required activities are conducted in a safe, timely, and proper manner, and in accordance with management guidance.

Also included in this element are resources to cover the LO/TO requirements.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	153.000.00Dollars
Factors	85	dollars per hour	1	Utilitiv Specialist	1800	Hours/ea	

Line Item OM09 - SOE's

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.						
	Item Desc - The Stationary Operating Engineers (SOEs) are required to be present around the clock and are on various jump shifts, 365 days per year to monitor both the control room and compressor house, and to make shiftly rounds. One SOE is required to cover the control room and one SOE is required to cover the compressor house and make shiftly rounds. Overtime is added to account for shift turnover, training, and absences due to illness, or vacations. SOEs also perform the following surveillances during their shiftly rounds: Photohelics; EGEN; Fan Operatibity; Oxygen Analyzers; and Hepa Filter Differential Pressure.						

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	22.942.44Hours
Factors	0.873	In FY-98 approximately 87.3% of this	3	SOEs	24	Hours per day (over 3 shifts)	365 days per year (continuous coverage)
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	3.285.00Hours
Factors	1	hours shift overlap (0.5 hrs per SOE	3	shifts	3	SOEs	365 per year
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	1.997.28Hours
Factors	0.076	approximately 7.6% of the coverage	3	SOEs	24	Hours per day	365 days per year to provide total

Line Item OM10 - Shift & Operations Orders

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.						
	Item Desc - Operations and Shift Orders Administration includes ongoing maintenance of all active building operations and shift orders by an experienced technical writer-administrator. Generally, the administrator updates existing orders in response to the building's day-to-day operating demands and in accordance with standing plant policies and procedures. In some cases, the administrator may develop an original order. In addition, the administrator processes the orders in accordance with plant and DOE standards, maintains an accurate and current working file, and maintains an up-to-date Operations Orders Manual. The administrator works in conjunction with building professional staff and management, subject matter experts, and other technical writers in order to ensure the accuracy, timeliness, and thoroughness of the operations orders.						

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	108.000.00Dollars
Factors	60	dollars per hour	1800	hours			
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	7.560.00Dollars
Factors	0.07	7% overtime	60	dollars per hour	1800	hours straight time	

Line Item OM12 - Decontamination

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev0.						
	Item Desc - Provide as needed decontamination support to support various operations in B776/777.						

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
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750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	K399S	Building 776 Project	Linear	180.00	Hours
Factors	1	Industrial Hygienist	9	Hours per day performing Be Decon	20	days per year performing Be Decon		
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	180.00	Hours
Factors	1	RCT	9	hours per day Be Decon	20	days performing Be decon per year		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	360.00	Hours
Factors	2	Process Specialists	9	hours per day for Be Decon	20	days		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	150.26	Hours
Factors	8	hours per week Pu Decon	52	weeks per year	0.3612	82/227 Days remaining		

Line Item OM14 - Management Assessment Program

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Coordination of Management Assessment Program for the 776/777 buildings. Reviews and tracks items identified through the performance of MAP's. Inputs actions into the PATS system and tracks to completion.							
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Cost Element		Skill		Department		Curve	Quantity	Units
A53	E-2	G010	ADMINISTRATIVE ASSISTANTS	K399S	Building 776 Project	Linear	124.800.00	Dollars
Factors	52	weeks per year	60	dollars per hour	40	hours per week coordinate/administer		

Line Item OM15 - Custodial

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Custodial Support covers basic cleaning support including cleaning of locker rooms and restrooms, common areas, office areas, conference rooms. Tasks include floor maintenance (vacuuming, sweeping, mopping, and polishing), bathroom cleaning and stocking of supplies and materials, housekeeping, disposal of rubbish, dusting office furniture, and light outside cleaning and snow management.							
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	L030	UTILITY WORKER	KD10H	776 Complex Steelworkers	Linear	5.400.00	Hours
Factors	3	Utility Workers	1800	Hours per year				

Line Item OM16 - Laundry

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Laundry stocking includes sorting and distributing anti-c clothing within Buildings 776/777 and the B778 change room. This pays for modesty clothing and anti-c clothing.							
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Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	L090	GENERAL LABORER	KD10H	776 Complex Steelworkers	Linear	786.00	Hours
Factors	524	hours	1.5	50% increase in needs over FY-99				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	624.00	Hours
Factors	1	Process Specialist	8	Hours Straight Time per week	52	weeks per year	1.5	50% increase in needs over FY-99
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.248.00	Hours
Factors	2	Process Specialists	8	Hours per week	52	weeks per year	1.5	50% increase in needs over FY-99
A5F	CSS FIXED PRICE	0000	NONE	K260S	Site Operations	Linear	720.000.00	Dollars
Factors	60000	Dollars/Month	12	Months				

Line Item OM17 - Training

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0. Item Desc - Training Qualification for personnel attending courses required for job performance as defined in the Qualification Performance & Training records for each building specific department and skill code. Education Reimbursement covers formal approved off-site educational programs and/or attendance at off-site training seminars that directly benefit the employees' performance.							
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The Training Coordinator ensures compliance with plant training standards, advises building management regarding training requirements, and provides guidance to the Training Scheduler for implementation of plantwide training standards.

The Training Scheduler provides logistics information regarding training sessions and schedules attendance of building personnel at required training courses.

Rad Ops Training funds support time spent in class to maintain sufficient qualifications.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KD10H	776 Complex Steelworkers	Linear	172.00	Hours
Factors	2 Personnel	86	Hours					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	1.656.00	Hours
Factors	18 Hours/quarterly module	23	RCTs	4	quarters			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	180.00	Hours
Factors	10 Personnel	18	Hours (RCRA)					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	2.838.00	Hours
Factors	33 D&D Workers	86	hours each per year general training					
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	1.290.00	Hours
Factors	15 D&D Workers	86	hours each per year general training					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K399S	Building 776 Project	Linear	35.000.00	Dollars
Factors	3500 \$/s per Education Reimbursement	10	Personnel					

Line Item OM18 - Price Anderson Coordination

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This activity includes support for authorization, review, and processing of Price Anderson Amendment Act (PAAA) issues. These items include reviewing Occurrence Reports, Radiological Deficiency Reports (RDR), Facility assessments, audits and surveillance reports, and adverse trends and indicators. The PAAA Coordinator investigates and documents issues/events or conditions at the facility level to the degree deemed necessary by the PA Compliance Manager and/or the RMRS General Council. This may include such activities as attending fact-finding meetings, participating in root cause investigations, interviewing facility personnel, reviewing records, participating in the development of corrective actions and generating closure documentation. In addition, this line contains the work scope for the Commitments Tracking Coordinator who is responsible for tracking all external and internal commitments for B776/777 personnel. This includes Corrective Action Requests (CAR), Deficiency Reports (DR), Environmental Commitments, JCUSC Safety Concerns, Compliance Schedule Agreements (CSA), Short-Term Compliance Statements (STCS), and all DOE commitments. Responsible for ensuring status revision requests, interim certificates of completion, and final certificates of completion are submitted to site Commitments Tracking personnel as required.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	72.800.00	Dollars
Factors	20 Hours per week coordinating Price	52	weeks per year	70	dollars per hour			
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	65.520.00	Dollars
Factors	18 hours per week for commitments	52	weeks per year	70	dollars per hour			

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	1.105.733.00	Dollars
Factors	1105733 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	452.355.70	Dollars
Factors	452356 Dollars							

Line Item T02 - Radiological Engineering

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Provides support services for ALARA, IWCPs, Building Assessments, Operation Orders, Technical Bases Documents, Radiological Deficiency Reports, Radiological Work Permits, Device/Source Audit Deliverables, ALARA job reviews and property/waste release evaluation database maintenance and Radiation Protection Program maintenance.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
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A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K399S	Building 776 Project	Linear	306,000.00	Dollars
Factors	2	Radiological Safety Engineer	1800	hours per year	85	per hour		

Line Item T03 - Stepoff Pad

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - This activity encompasses the radiological monitoring of equipment exiting the Radiological Controlled Areas. The proper release documentation of material and equipment leaving the radiological controlled areas is the responsibility of the set-off pad RCT. The step-off pad RCT responds to any contamination monitor alarm from personnel self-monitoring or personnel requesting help for self-monitoring. Equipment and personnel monitoring are required by the Site Radiological Control Manual and DOE Order 5400.5 to ensure the safety of the workers, the public and the environment. The step-off pad RCT also performance tests the instruments used at the step-off pad on a daily basis.							

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	2,340.00	Hours
Factors	1 RCT	9 hrs per day	52 weeks	5 days per week		
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	234.00	Hours
Factors	2340 Total ST hours	0.1 10% Over-Time	1 RCT			

Line Item T04 - Contamination Control

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - Identification of contamination sources to prevent the spreading of contamination in controlled areas and individual exposures. Detect contamination in cold areas; provide technical information on amount of contamination and degree of risk an corrective actions. Respond to SAAM alarms on off normal conditions, and respond to loss of contamination control issues, i.e., Radiological contamination of gloves, booties, and personnel. Perform pre-job surveys on misc. minor tasks to ensure the Radiological Work Permits are adequate to control the work performed. Also, decontamination/contamination area rollback will be performed to increase work efficiency, reduce laundry costs, and minimize the generation of of radioactive waste. The process will include walls and floors, as well as all materials and equipment in the area to be downgraded, to be surveyed and/or decontaminated. A representative sample of rooms slated for decontamination is as follows: Rooms: 134E; 430; 463; 452; 131; 134; and 154A.							

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	468.00	Hours
Factors	2 Hours/day	234 working AWS days				
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	46.80	Hours
Factors	0.1 10% Overtime	468 Straight Time Hours				

Line Item T05 - Radiological Work Permit

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - Writing and distribution of Radiological Work Permits which define the safe radiological working parameters. Includes maintenance of a filing system to control the number of RWPs released and tracks returns to the RWP office through a daily log. Archiving of expired Radiological Work Permits and their supporting documentation is also performed. Issues and tracks return of Electronic Pocket Dosimeters (EPD). Records and tracks individual doses from EPDs. Files and archives all radiological surveys.							

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	2,106.00	Hours
Factors	1 RCT	9 Hours per day	234 Working AWS days			
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	210.60	Hours
Factors	0.1 10% Overtime	2106 Straight Time Hours				

Line Item T06 - ALARA Committee

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.							
	Item Desc - Addresses radiological safety concerns and issues that have been identified by the building, programs, or an activity that was conducted. The Chairperson shall be the Operations/Facility Manager, or designee, and the committee shall consist of representatives from departments that support the area. Performs evaluations to determine whether activities are being conducted in accordance with the ALARA Program and implementing procedures. Formulates and coordinates the implementation of the Project Area ALARA goals. Meets monthly on any actions taken to resolve radiological issues, noteworthy ALARA							

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accomplishments, ALARA concerns, etc.. Generates a status report of items discussed and/or acted upon. Includes walk-downs, meetings, reporting, etc..

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KD10H	776 Complex Steelworkers	Linear	12.00	Hours
Factors	1	hour per monthlv meeting	1	RCT	12	months		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00	Hours
Factors	1	hour per monthlv meeting	2	Pipefitters	12	Months		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	24.00	Hours
Factors	1	hours per monthly meeting	2	Process Specialists	12	months		

Line Item T07 - Analytical Lab - DAC

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Lab Support includes Offsite Commercial Support, Hot/Mixed Lab Support, Sample Team Support, and Mobile Lab Support . These activites are described below:

DAC Analytical Support - Gross Alpha analysis for the following items:

- 1) Gross Alpha (OS01-02)
- 2) Radiological Screening (OS03-04)
- 3) Gross Alpha/Beta (OS05-17)
- 4) Gross Alpha/Beta - Air Filters (OS18-20)
- 5) Air Filter Loading, Unloading, and Compositing (OS-21)

The type and quantity of the analysis performed is dependent on project customer needs as well as the laboratory capability and capacity.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analvtical Laboratory Services	Linear	22.00	Dollars
Factors	22	dollars per DAC Sample						

Line Item T08 - Nuclear Safety Support

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - This function is performed by Nuclear Safety Engineering which provides nuclear technical support, facility safety analysis, Unreviewed Safety Question Determination (USQD) of activities and documents submitted for review, participation in the Operational Review Committee (ORC) process to clarify and advise members on issues concerning USQDs, Safety Evaluation Screens (SESs), and Operational Safety Requirements/Technical Safety Requirements (OSR/TSR) page changes and guidance. Historically, three engineers have been required to perform this scope.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	306.000.00	Dollars
Factors	2	Nuclear Safety Engineer	85	dollars per hour	1800	hours per year each		

Line Item T10 - Electrical Engineering

BOE

Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Electrical Engineering serves as Subject Matter Expert on all electrical power related equipment and systems, supports IWCP, performs engineering operability evaluations on an as-needed basis; supports authorization basis activities, and serves as liaison/Point of Contact with RMRS Central Engineering on building engineering matters. Additionally, This position will provide engineering support for procedure development, system walkdown and one line drawing development, labeling of key components and development of system descriptions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	81.600.00	Dollars
Factors	1	Electrical Engineer	12	packages per year	80	hours per design modification	85	dollars per hour
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	35.700.00	Dollars
Factors	1	Electrical engineers	12	EOEs per year	35	hours per Engineering Operability	85	dollars per hour
A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	53.040.00	Dollars
Factors	2	LO/TOs per week	6	hours support for Lockout/Tagout	52	Weeks per year	85	dollars per hour

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A52	TENERA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	51.000.00	Dollars
Factors	1	Electrical Engineer	15	ESPs per year	40	hours per Engineering Support	85	dollars per hour
A57	LATA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	28.000.00	Dollars
Factors	70	dollars per hour	10	hours support to Standard Work	40	SWPs requiring EE support		
A57	LATA	E040	ELECTRICAL ENGINEERS	K399S	Building 776 Project	Linear	14.400.00	Dollars
Factors	1	electrical engineer	10	calculation in support of various	24	hours per electrical calculation	60	dollars per hour

Line Item T11 - Mechanical Engineering

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Mechanical Engineering serves as a subject matter expert on all mechanical equipment related systems. Additionally, this discipline will provide engineering support for procedure development, system walkdowns, and one line drawing development, labeling of key components, and development of system descriptions.

Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E070	MECHANICAL ENGINEERS	K399S	Building 776 Project	Linear	153.000.00	Dollars
Factors	1	Mechanical Engineer	1800	Hours per year	85	dollars per hour		
A57	LATA	E070	MECHANICAL ENGINEERS	K399S	Building 776 Project	Linear	126.000.00	Dollars
Factors	70	dollars per hour	1	Mechanical Engineers	1800	hours each per year		

Line Item T13 - Fire Protection Engineering

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Fire Protection Engineering provides technical support and fire hazards analysis for the building.

Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E130	OTHER ENGINEERS	K252S	Engineering	Linear	153.000.00	Dollars
Factors	85	dollars per hour	1800	hours				

Line Item T14 - Emergency Preparedness

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Administers the implementation of the RFETS Emergency Preparedness Program for the protection of personnel, the public, and the environment during emergency response. Develops and implements of the Building Emergency Program, provides technical assistance to building management for development and conduct of building drills, provides procedure review and approval and trains the Building Emergency Preparedness Personnel on new procedures and development processes.

A. Develop/conduct building emergency drills.

B./C./D. Drill controller/evaluator.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers	Linear	48.00	Hours
Factors	2	RCT	2	hours per drill	12	Drills per year		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers	Linear	96.00	Hours
Factors	4	Process Specialist	2	hours per drill	12	Drills per year		
A52	TENERA	P170	OTHER ADMINISTRATIVE & PROFE	K399S	Building 776 Project	Linear	85.500.00	Dollars
Factors	95	\$'s/Hour	1800	Hours	0.5	Bepa Consultant		

Line Item T15 - Procedures

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Procedure Administration function includes development, updates, modifications and issuance of procedures to operate the facility.

Cost Element		Skill		Department		Curve	Quantity	Units
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A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	K399S	Building 776 Project	Linear	117,000.00	Dollars
Factors	1	Procedure Writer	65	dollars per hour	1800	hours each per year		

Line Item T16 - Criticality Engineering

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Criticality Engineer provides the building with criticality safety analysis that is in conformance to applicable standards, rules, and orders to provide guidance in the form of limits and procedures which ensure the subcriticality of the building's fissile material handling, processing, and storage operations. Two Criticality Engineers are required plus 0.5 for the Lead Criticality Engineer.

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	382,500.00	Dollars
Factors	125	dollars per hour	1800	hours each per year	1.7	Criticality Safety Engineers		

Line Item T17 - Plan of the Week/DOD

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - The Plan of the Week (POW) is a meeting held each week to plan all work activities for the coming week, discuss the current Facility condition, radiological concerns, to update the activity schedule, set priorities, and allocate resources. The Plan of the Week coordinator is funded in this activity.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	936.00	Hours
Factors	18	Hours per week	52	Weeks per year				

Line Item T19 - Project Safety Officer

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - A. Perform required Health and Safety activities. Identify hazards and potential accident producing situations within the work place. Review work packages, engineering work orders and equipment installation or maintenance for safety systems and interlock functions. Promote and maintain awareness through employee participation, enforcement of safety rules, accident tracking, and trending and corrective actions.

B. ASME registration and training required to perform required Health and Safety activities above.

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	K399S	Building 776 Project	Linear	153,000.00	Dollars
Factors	1	Industrial Hvgienist	1800	Hours per year	85	dollars per hour		

Line Item T20 - Plant Review Committee

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc - Plant Review Committee is a new requirement being planned for in FY-99.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	104.00	Hours
Factors	2	hours per week	52	weeks per year				
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K399S	Building 776 Project	Linear	8,840.00	Dollars
Factors	1	Nuclear Safety Professional	2	hours per week	52	Weeks per year	85	dollars per hour
A5H	SUBCONTRACTED SRVS	E110	QUALITY CONTROL ENGINEERS	K399S	Building 776 Project	Linear	8,840.00	Dollars
Factors	1	QA Professional	2	Hours per week	52	weeks per year	85	dollars per hour

Line Item T21 - Health Physics And Instrumentation

BOE Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.

Item Desc -
A. Leased Labor cost of calibrations of instruments used by building radiation control personnel and other building personnel: Alphamets - 114 hrs, A-100 - 176 hrs, Mircorem - 90 hrs, DRDs - 46 hrs, SAC-4 - 160 hrs, Electras - 441 hrs, Hi Vol Samplers - 34 Hrs, Lo Vol Samplers - 40 hrs, Ludlum 12-1A - 224

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hrs, Ludlum 12-4 - 247 hrs, Ludlum 31 - 7 hrs, Ludlum 2 - 5 hrs, PCM-2 - 1100 hrs, RO-20 - 605 hrs, SAIC AP-2 - 16 hrs, for a total of 3305 hrs

B. Parts, supplies and overhead costs of calibration of instruments used by building radiation control personnel and other building personnel: Balances, O2 Analyzers, magnahelics, photohelics, pressure differentials, torque wrenches, PCM-2s, Ludlums, etc.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5C	SUPPLIES		0000 NONE	K399S Building 776 Project	Linear	18.000.00	Dollars
Factors		18000 Dollars for supplies					
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S Building 776 Project	Linear	230.934.00	Dollars
Factors		66 dollars per hour 3499 Hours					

Line Item T22 - Radiological Management

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc -									

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S RMRS Salaried	Linear	3.600.00	Hours
Factors		2 Radiological Foreman 1800 Hours each					
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S RMRS Salaried	Linear	1.000.00	Hours
Factors		1 Off-shift Supervisor 1000 hours per year					
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S RMRS Salaried	Linear	540.00	Hours
Factors		0.15 15% Overtime 3600 hours Straight time					
A5C	SUPPLIES	0000	NONE	K399S Building 776 Project	Linear	25.000.00	Dollars
Factors		25000 Misc Supplies					

Line Item T23 - Criticality Safety Officer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - The Criticality Safety Officer performs the duties set forth in the Nuclear Criticality Safety Manual including serving as liaison for the criticality safety matters between organizations that have custody of fissionable material and all other organizations, coordination of requests for Critical Safety Engineer, and preparation of criticality safety limit postings. Also included is the annual assessments.									

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	R100S RMRS Salaried	Linear	153.000.00	Dollars
Factors		1800 Hours/ea 85 dollars per hour					

Line Item T24 - Occurrence Reporting

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.
	Item Desc - This activity consists of support required to maintain occurrence reporting requirements, including preparing and uploading of notifications, conducting investigations and critiques as necessary, processing 10-day update reports, preparing root cause analysis reports and process final reports for DOE approval. In addition, required reading is included in this work scope.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K399S Building 776 Project	Linear	76.500.00	Dollars
Factors		900 Hours per year 1 Occurrence Reporting Professional 85 dollars per hour					

Line Item T27 - Chemical Control Officer

BOE	Historical Data Source - The historical data is from the FY98 actual costs for technical support activity. These costs have been factored to the line item level based on FY99 line item to total technical support quotients. The detailed factoring spreadsheet can be found in B776/777 FY99 Project Summary Document - Rev 0.									
	Item Desc - Serves as the single point of contact for chemical management within the Building 776/777 complex, maintains the Chemical Management Plan, maintains a list of chemical storage sites, maintains the Chemical Management Data Base, tracks the quantities of chemicals in the Building 776/777 complex and conducts bi-annual wall-to-wall inventories and random inventories as needed, reviews and approves requisitions for chemicals, maintains Material Safety Data Sheets for chemicals stored in the Building 776/777 complex, works with managers, supervisors and other staff to develop and implement appropriate									

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chemical procedures and practices and performs the monthly inspections of flammable cabinets.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	P170 OTHER ADMINISTRATIVE & PROFE	K399S Building 776 Project	Linear	153.000.00	Dollars

Factors 1 Chemical Control Officer 1800 Hours 85 dollars per hour

WBS No: 1DAB05 Title: B776/777 Authorization Basis

Activity ID: 1DF0500AB1 Description: B776/777 Landlord - AB Maintenance Activities

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
B01	AB Annual Update May 22-Jul 23	1.00	each	HC	0	0	0	102.745	0	102.745	0	102.745
Total for Activity 1DF0500AB1:						0	0	102.745	0	102.745	0	102.745

Line Item B01 - AB Annual Update May 22-Jul 23

BOE

Historical Data Source - Development of AB Implementation Plan and BIO Rev 1 (FY-99)
Item Desc - Project Management activities associated with changes necessary to perform annual update and inclusion of Plasma arc and laser cutting technologies into the BIO analysis.
Breakdown of Historical Data:
Item - A/B Revision
Units - ea
Unit Cost - \$1,785k
Unit Cost Adjustment factor - (\$833.6k)
Revised Unit Cost - \$951.4k
Basis for adjustment - This revision is to modify the existing BIO for B776/777. The \$1,750k is the TEC for AB Implementation performed in FY-99. Although all sections will require review due to this change, it is expected that only portions of the AB will require revision.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A52 TENERA	0000 NONE	K399S Building 776 Project	Linear	101.745.00	Dollars

Factors 3.5 dedicated nuc safetv engineers 9 hours per day project support 85 dollars per hour 38 days

A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	1.000.00	Dollars
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Factors 1 Dollars 1000 dollars for supplies and copy service

Activity ID: 1DF0500ABA Description: B776/777 Landlord - AB Maintenance/Annual Update

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
B01	Annual Update	1.00	each	HC	0	0	0	101.980	0	101.980	0	101.980
Total for Activity 1DF0500ABA:						0	0	101.980	0	101.980	0	101.980

Line Item B01 - Annual Update

BOE

Historical Data Source - Development of AB Implementation Plan and BIO Rev 1 (FY-99)
Item Desc - Project Management activities associated with changes necessary to perform annual update and inclusion of Plasma arc and laser cutting technologies into the BIO analysis.
Breakdown of Historical Data:
Item - A/B Revision
Units - ea
Unit Cost - \$1,785k
Unit Cost Adjustment factor - (\$833.6k)
Revised Unit Cost - \$951.4k
Basis for adjustment - This revision is to modify the existing BIO for B776/777. The \$1,750k is the TEC for AB Implementation performed in FY-99. Although all sections will require review due to this change, it is expected that only portions of the AB will require revision.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A52 TENERA	0000 NONE	K399S Building 776 Project	Linear	100.980.00	Dollars

Factors 1 Dollars 9 hours per day project support 44 days 85 dollars per hour

3 dedicated Nuclear Safetv Engineers

A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	1.000.00	Dollars
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Factors 1 Dollars 1000 dollars for supplies and copy service

Activity ID: 1DF0501A00 Description: FY-01 B776/777 Authorization Basis

Cost Risk 2 Schedule Risk 3

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
N1R0500A01	Annual Update	1.00	each	HC	0	0	0	750.000	0	750.000	0	750.000

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Activity ID: 1DF0501A00

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1DAB
Activity Filter * Starts In FY *

SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	39.675	39.675	0	39.675
Total for Activity 1DF0501A00:						0	0	750.000	39.675	789.675	0	789.675

Line Item N1R0500A01 - Annual Update

BOE	Historical Data Source - B776/777 BIO Implementation Rev 1. Item Desc - Annual Update to the B776/777 BIO Breakdown of Historical Data: Item - Implementation of B776/777 BIO Units - ea Unit Cost - \$1,785k Unit Cost Adjustment factor - (\$1,035k) Revised Unit Cost - \$750k Basis for adjustment - This is not a complete revision to the existing BIO. Each section will require review and revision as necessary based on further reductions to B776/777 from FY-00. The facility condition at the end of FY-00 will determine the necessary adjustments to the A/B document.											
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Resources	Cost Element	Skill		Department		Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE	K399S	Building 776 Project	Linear	750.000.00	Dollars
Factors 750000 Dollars								

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	23.904.32	Dollars
	Factors 23904.3 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	15.770.82	Dollars
	Factors 15770.8 Dollars									

Activity ID: 1DF0502RM0 Description: FY-02 B776/777 Authorization Basis

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
N1R0500A01	Annual Update	1.00	each	HC	0	0	0	500.000	0	500.000	0	500.000
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	74.539	74.539	0	74.539
Total for Activity 1DF0502RM0:						0	0	500.000	74.539	574.539	0	574.539

Line Item N1R0500A01 - Annual Update

BOE	Historical Data Source - B776/777 BIO Implementation Rev 1. Item Desc - Annual Update to the B776/777 BIO Breakdown of Historical Data: Item - Implementation of B776/777 BIO Units - ea Unit Cost - \$1,785k Unit Cost Adjustment factor - (\$1,285k) Revised Unit Cost - \$500k Basis for adjustment - This is not a complete revision to the existing BIO. Each section will require review and revision as necessary based on further reductions to B776/777 from FY-00. The facility condition at the end of FY-00 will determine the necessary adjustments to the A/B document.											
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Resources	Cost Element	Skill		Department		Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE	K399S	Building 776 Project	Linear	500.000.00	Dollars
Factors 500000 Dollars								

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	51.173.44	Dollars
	Factors 51173.4 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	23.365.72	Dollars
	Factors 23365.7 Dollars									

Activity ID: 1DF0503RM0 Description: FY-03 B776/777 Authorization Basis

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
N1R0500A01	Annual Update	1.00	each	HC	0	0	0	500.000	0	500.000	0	500.000

WBS No: 1DAB05
Activity ID: 1DF0503RM0

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1DAB
Activity Filter *

Starts In FY *

SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	138.277	138.277	0	138.277
Total for Activity 1DF0503RM0:						0	0	500.000	138.277	638.277	0	638.277

Line Item N1R0500A01 - Annual Update

BOE	Historical Data Source - B776/777 BIO Implementation Rev 1. Item Desc - Annual Update to the B776/777 BIO Breakdown of Historical Data: Item - Implementation of B776/777 BIO Units - ea Unit Cost - \$1,785k Unit Cost Adjustment factor - (\$1,285k) Revised Unit Cost - \$500k Basis for adjustment - This is not a complete revision to the existing BIO. Each section will require review and revision as necessary based on further reductions to B776/777 from FY-00. The facility condition at the end of FY-00 will determine the necessary adjustments to the A/B document.											
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Resources	Cost Element	Skill		Department		Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE	K399S	Building 776 Project	Linear	500.000.00	Dollars
Factors 500000 Dollars								

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	99.933.87	Dollars
	Factors 99933.9 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	38.342.63	Dollars
	Factors 38342.6 Dollars									

Activity ID: 1DF0504RM0 Description: FY-04 B776/777 Authorization Basis

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
N1R0500A01	Annual Update	0.50	each	HC	0	0	0	250.000	0	250.000	0	250.000
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	35.629	35.629	0	35.629
Total for Activity 1DF0504RM0:						0	0	250.000	35.629	285.629	0	285.629

Line Item N1R0500A01 - Annual Update

BOE	Historical Data Source - B776/777 BIO Implementation Rev 1. Item Desc - Annual Update to the B776/777 BIO Breakdown of Historical Data: Item - Implementation of B776/777 BIO Units - ea Unit Cost - \$1,785k Unit Cost Adjustment factor - (\$1,285k) Revised Unit Cost - \$500k Basis for adjustment - This is not a complete revision to the existing BIO. Each section will require review and revision as necessary based on further reductions to B776/777 from FY-00. The facility condition at the end of FY-00 will determine the necessary adjustments to the A/B document.											
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Resources	Cost Element	Skill		Department		Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE	K399S	Building 776 Project	Linear	500.000.00	Dollars
Factors 500000 Dollars								

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	11.624.55	Dollars
	Factors 11624.6 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	24.004.07	Dollars
	Factors 24004.1 Dollars									

Activity ID: 1DXXX504RM Description: FY-05 B776/777 Authorization Basis

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
N1R0500A01	Annual Update	0.50	each	HC	0	0	0	248.908	0	248.908	0	248.908

WBS No: 1DAB05
Activity ID: 1DXXX504RM

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1DAB
Activity Filter * Starts In FY *

SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	132.815	132.815	0	132.815
Total for Activity 1DXXX504RM:						0	0	248.908	132.815	381.723	0	381.723

Line Item N1R0500A01 - Annual Update

BOE	Historical Data Source - B776/777 BIO Implementation Rev 1. Item Desc - Annual Update to the B776/777 BIO Breakdown of Historical Data: Item - Implementation of B776/777 BIO Units - ea Unit Cost - \$1,785k Unit Cost Adjustment factor - (\$1,285k) Revised Unit Cost - \$500k Basis for adjustment - This is not a complete revision to the existing BIO. Each section will require review and revision as necessary based on further reductions to B776/777 from FY-00. The facility condition at the end of FY-00 will determine the necessary adjustments to the A/B document.											
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	K399S Building 776 Project	Linear	500.000.00	Dollars
Factors 500000 Dollars						

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	94.254.96	Dollars
	Factors 94255 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	38.559.75	Dollars
	Factors 38559.8 Dollars									

Report Totals:

Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
Total	Total	Cost	& Escalation	Cost		
517.267	12.944.022	29.326.716	7.842.347	50.113.085	4.958.579	55.071.664